THE DRUG AND COSMETIC INDUSTRY

ESTABLISHED 1914

Formerly Called "DRUG MARKETS"

July, 1933

Editorials 13
Watch the Codes—Our Markets—The Institute's Job.

Feature Articles

The Industrial Recovery Act 15
Tooth Powders 19
A. P. M. A. in Session 21
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VOL. XXXIII **DRUG MARKETS, INC.** NUMBER 1
PUBLISHERS

Publication Office, 28 Renne Ave., Pittsfield, Mass. Editorial and General Office, 101 W. 31st St., N.Y. City

Editor
THOMAS R. FARRELL

Business Manager
FRAZER V. SINCLAIR

PUBLISHED MONTHLY AT PITTSFIELD, MASS., SUBSCRIPTION PRICE, TWO DOLLARS A YEAR, IN ADVANCE, FOREIGN COUNTRIES THREE DOLLARS, THREE WEEKS' NOTICE IS REQUIRED TO CHANGE SUBSCRIBER'S ADDRESSES, AND WHEN NOTIFYING KINDLY GIVE BOTH OLD AND NEW ADDRESSES; PRINTED BY THE SUN PRINTING COMPANY, PITTSFIELD, MASS. ENTERED AS SECOND CLASS MATTER, JANUARY 1, 1928 AT THE POST OFFICE AT PITTSFIELD, MASS., UNDER THE ACT OF MARCH 3, 1879.

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CETONIA #2

for

Individuality

A powerful, lasting odor developed especially for low priced powder soaps. Cetonia #2 is excellent as a toner and embellisher for many types of odors—particularly the oriental. It lends a true individuality to all scents.

IN addition to its other qualities, Cetonia #2 has splendid fixative value.

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GIVAUDAN-DELAWANNA INC.

80 FIFTH AVENUE, NEW YORK, N. Y.

BRANCHES:

Philadelphia, Los Angeles, Atlanta, Cincinnati, Detroit, Dallas, Baltimore, New Orleans, Chicago, San Francisco, Montreal, Havana

Buyers' Guide

The firms listed below are reliable sources of supply which we are glad to recommend to our readers.

Medicinal Chemicals
Abbott Laboratories
J. T. Baker Chemical Co.
Benzol Products Co.
California Fruit Growers Exchange
Dow Chemical Co.
Heyden Chemical Corp.
Mallinckrodt Chemical Works
Merck & Co., Inc.
Monsanto Chemical Works
N. Y. Quinine & Chemical Works
Chas. Pfizer & Co., Inc.
Sherka Chemical Co.

Alcohol
A. K. Hamilton
Rossville Commercial Alcohol Corp.
U. S. Industrial Alcohol Co.

Alkaloids
Abbott Laboratories
J. T. Baker Chemical Co.
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works

Bromides
J. T. Baker Chemical Co.
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works

Citric Acid
H. J. Baker & Bro.
J. T. Baker Chemical Co.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works
Chas. Pfizer & Co., Inc.

Glandular Products
Wilson Laboratories

Magnesia
Schofield-Donald Co., Inc.

Salicylates
J. T. Baker Chemical Co.
Dow Chemical Co.
Heyden Chemical Corp.
Mallinckrodt Chemical Works
Merck & Co., Inc.
Monsanto Chemical Works
N. Y. Quinine & Chemical Works

Aromatic Chemicals
W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
P. R. Dreyer, Inc.
E. I. du Pont de Nemours & Co., Inc.
Benj. French, Inc.
Fritzsche Brothers, Inc.
General Drug Co.
Givaudan-Delawanna, Inc.
Magnus, Mabee & Reynard, Inc.
Compagnie Parento, Inc.
Sherka Chemical Co.
A. M. Todd Co.
Ungerer & Co.
van Ameringen-Haebler, Inc.

Essential Oils
W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
P. R. Dreyer, Inc.
Fritzsche Brothers, Inc.
Magnus, Mabee & Reynard, Inc.
Compagnie Parento, Inc.
A. M. Todd Co.
Ungerer & Co.
van Ameringen-Haebler, Inc.

Flavors
W. J. Bush & Co., Inc.
California Fruit Growers Exchange
Dodge & Olcott Co., Inc.
P. R. Dreyer, Inc.
Fritzsche Brothers, Inc.
A. K. Hamilton
Magnus, Mabee & Reynard, Inc.
Monsanto Chemical Works
Compagnie Parento, Inc.
Ungerer & Co.
van Ameringen-Haebler, Inc.

Cocoa Butter
R. F. Revson Co.

Cod Liver Oil
W. Benkert & Co., Inc.
P. R. Dreyer, Inc.

Mineral Oil
M. W. Parsons, Imports
S. Schwabacher & Co., Inc.
Stanco Distributors, Inc.

Quinine
Mallinckrodt Chemical Works
Merck & Co., Inc.
N. Y. Quinine & Chemical Works

Cosmetic Materials
M. W. Parsons, Imports
John Powell & Co., Inc.
R. F. Revson Co.

Cosmetics (Private Brand)
Sterling Manufacturing Co.

Bath Crystals
Solvay Sales Corp.

Botanical Drugs
W. Benkert & Co., Inc.
J. L. Hopkins & Co.
Peek & Velsor, Inc.
S. B. Penick & Co.

Absorption Bases
Th. Goldschmidt Corp.
M. W. Parsons, Imports

Beeswax
Koster-Keunen
Theodor Leonhard Wax Co., Inc.
Will & Baumer Candle Co.

Chalk
Industrial Chemical Sales Co. Inc.
John & E. Sturge, Ltd.
Universal Gypsum & Lime Co.

Colors
Interstate Color Co., Inc.
R. F. Revson Co.

Gums
Thurston & Braidich

Lanolin
American Lanolin Corp.
Bopf-Whittam Corp.

Stearates
Franks Chemical Products Co.
Mallinckrodt Chemical Works
M. W. Parsons, Imports

Titanium Dioxide
Titanium Pigment Co.

Zinc Oxide
New Jersey Zinc Co.

Containers & Machinery

Bottles
Carr-Lowrey Glass Co.
Hart Glass Mfg. Co.
Hazel-Atlas Glass Co.
Maryland Glass Corp.
Owens-Illinois Glass Co.

Boxes
C. F. Hatch Co.

Collapsible Tubes
National Collapsible Tube Co.

Glassine Paper
Riegel Paper Corp.

Packing Material
Kimberly-Clark Corp.

Vials
Kimble Glass Co.

Corks
Armstrong Cork & Insulation Co.

Metal Caps
Aluminum Seal Co.
Anchor Cap & Closure Corp.
Armstrong Cork & Insulation Co.
Crown Cork & Seal Co.
Ferd. Gutmann & Co.
Phoenix Metal Cap Co.

Molded Caps & Containers
Anchor Cap & Closure Corp.
Armstrong Cork & Insulation Co.
Beetleware Corp.
Resinox Corp.

Liners
Armstrong Cork & Insulation Co.

Tablet Counting & Filling Machinery
John W. Ayers & Son

Capping, Filling & Packaging Machinery
Arthur Colton Co.
Karl Kiefer Machine Co.
Geo. G. Rodgers Co.
Chas. Ross & Son Co.
F. J. Stokes Machine Co.
Stokes & Smith Co.
U. S. Bottlers Machinery Co.

Tanks, Kettles & Mixing Equipment
Ertel Engineering Corp.
Pfaudler Company
Chas. Ross & Son Co.
F. J. Stokes Machine Co.
U. S. Bottlers Machinery Co.

Production Equipment
Ertel Engineering Corp.
Karl Kiefer Machine Co.
Pfaudler Company
Chas. Ross & Son Co.
U. S. Bottlers Machinery Co.

Clear at Severe Winter Temperatures

MADE WITH EXCHANGE COLD PRESSED OIL OF LEMON | **MADE WITH ANOTHER BRAND BOUGHT ON THE OPEN MARKET**

Unfiltered 5% (by Volume) Solutions of Lemon Oil in 95% Alcohol

New Clarified Exchange Oil of Lemon provides sediment-free extract under severe winter cold.

A 5% by volume solution of Exchange Lemon Oil in alcohol conforms to the definition for lemon extract adopted by U. S. Department of Agriculture.

AT LOW temperatures where extracts made with most lemon oils deposit a sediment, those made with Exchange Oil of Lemon remain clear and brilliant. Compare the two extracts at the left which were subjected to 15° F. for 24 hours.

When you prepare extracts in your factory with Exchange Oil of Lemon, you get immediately a clear, yellow solution. Without filtration. Without waste. It is ready to be used or bottled at once and conforms with the definition for lemon extract adopted by U. S. Department of Agriculture.

The Exchange process of manufacture removes the troublesome insoluble substances from Lemon Oil that cause muddiness in extracts.

Also Improved in Other Ways

This new method also improves the flavor, color, and aroma of Exchange Brand Oil of Lemon. And it has for years been notable for these qualities, due to the application of Exchange standards of production control to rich California lemons.

It is uniform in performance. Stable in your finished products.

Let Results Give Proof

Your interest in better results and lower costs prompts you to make this test at once: Order a small supply of Exchange Brand Oil of Lemon. Test it in your products. Then compare the cost and figure your saving.

QUICK FACTS

1. **Flavor** that suggests a freshly-cut lemon
2. Finer **Aroma**
3. Deep natural **Color**
4. **Stable** in your finished product
5. **Uniform Performance**
6. **Lower Cost** per unit of flavor

AND NOW...

7. **CLARIFIED.** No sediment. No cloud. No **filtration.** No waste.

Sold to the American market exclusively by

FRITZSCHE BROTHERS, Inc.
78-84 Beekman Street, New York City

DODGE & OLCOTT COMPANY
180 Varick Street, New York City

Distributors for

CALIFORNIA FRUIT GROWERS EXCHANGE
Products Department, Ontario, California

Producing Plant: EXCHANGE LEMON PRODUCTS CO., Corona, Calif.

Exchange BRAND

OIL OF LEMON

Copr., 1933, Products Department, California Fruit Growers Exchange

SATISFACTION

What a satisfaction: To know that your wants or wishes will be carried out explicitly—to have the confidence that your requirements will be fulfilled exactly, conscientiously, faithfully. Let us demonstrate.

MANUFACTURERS OF
INDUSTRIAL ALCOHOL, (Pure and Denatured, all formulae)
And the following list of Industrial Chemicals

ACETATES
(Amyl, butyl and ethyl)
ANTIDOLORIN (ETHYL CHLORIDE (U.S.P. of guaranteed purity for anesthesia)
BUTYRATES
(Amyl, butyl and ethyl)
COTTON SOLUTIONS
ETHYL CHLORIDE
(For refrigeration and ethylation)
FORMATES
ARTIFICIAL FRUIT ETHERS
(For flavoring purposes)
GUM SOLUTIONS
ISOPROPYL ALCOHOL
ISOPROPYL ACETATE
KETACETATE
LEATHER DOPES
SPECIAL ESTERS
CONCENTRATED NITROUS ETHER
(For sweet spirits of niter, U.S.P.)
PLASTICISERS
(Dibutylphthalate, etc.)
PROPIONATES
(Amyl, butyl and ethyl)
PURE ISOAMYL ALCOHOL
REFINED FUSEL OIL
SECONDARY ALCOHOLS AND ESTERS

QUAKER BRAND
Alcohol
FRANCO-AMERICAN STANDARDIZED CHEMICALS

Descriptive booklets free on request.

Pennsylvania Sugar Company
Franco-American Chemical Works

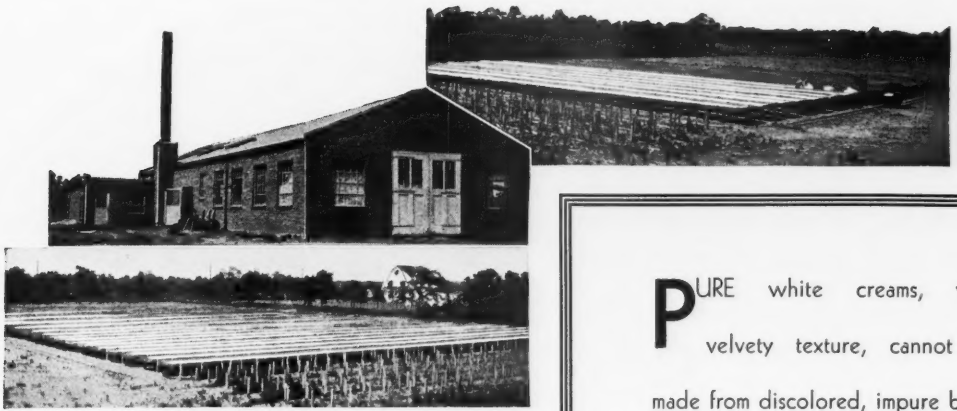
SALES OFFICE

95 WALL STREET **A. K. Hamilton** NEW YORK, N. Y.

Sales representatives and warehouse stocks in principal cities

Distillery — Philadelphia, Pa. **Chemical Plant — Carlstadt, N. J.**

K O S T E R
K E U N E N



SUN-BLEACHED BEESWAX

Beeswax guaranteed 100% sunbleached without any chemicals. Visit our bleacheries and convince yourself.

PURE white creams, with velvety texture, cannot be made from discolored, impure beeswax. Good creams demand the best beeswax obtainable.

The aim of the Koster Keunen organization has been to produce pure white beeswax, of the finest quality.

Facilities include 5 acres under ideal sun conditions, at Sayville, Long Island. Over 80 years' experience in Europe serve as a background in producing this superior product. We will gladly send samples without obligation.

KOSTER KEUNEN

SUNBLEACHED and YELLOW BEESWAX

Sayville (Long Island) New York

KIMBLE GLASS VIALS — *a direct link between your prospects and actual sales!*

SEEING is believing—and there is no surer, faster or better way to let your prospective customers *SEE* your products than by sampling in Kimble Glass Vials.

These sparkling crystal, sanitary, attractively designed vials are today's headliners in carrying nationally known products throughout the world. Extensive sampling campaigns—effective packaging programs—have been carried out through their use by outstanding firms in the drug, pharmaceutical, perfume and proprietary world. Kimble Vials—available in the form of dropper vials, applicators, slip-cap capsule vials, metal or moulded screw cap vials, and many other types—are ideal small glass containers that appeal to the eye, invite sales, and stimulate profits.

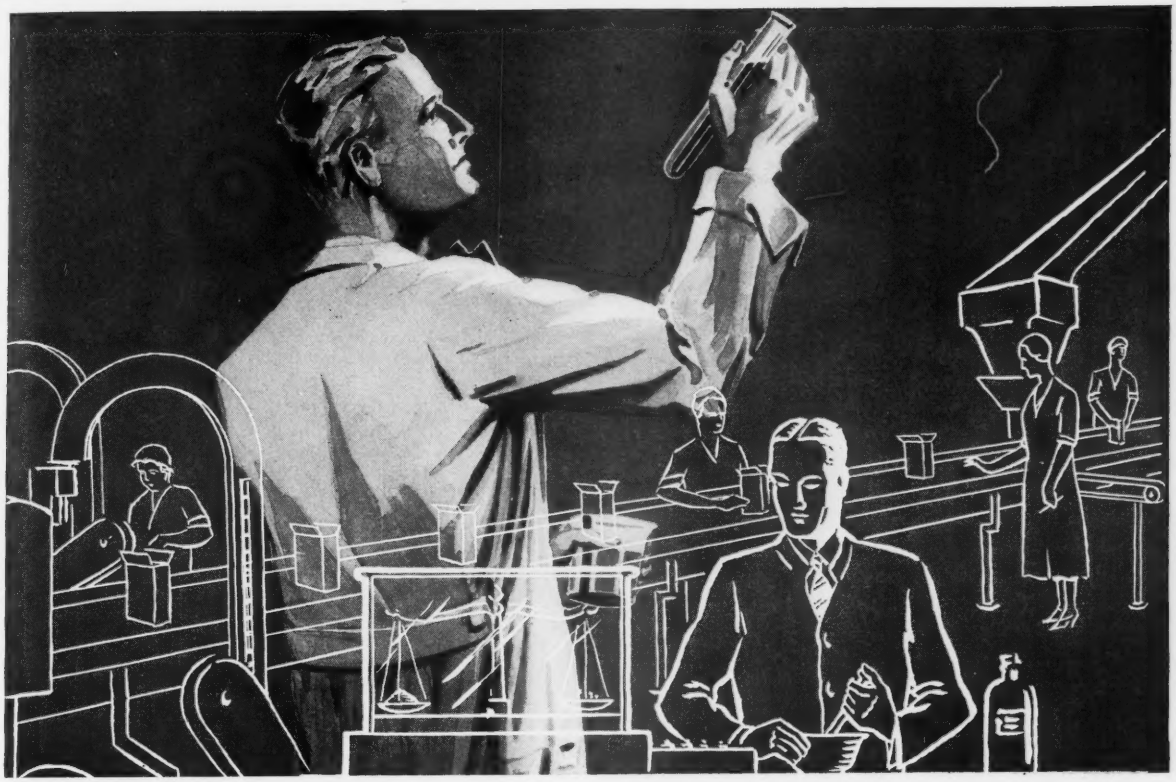
Kimble Vials are made entirely by automatic machines. Their walls are uniform and sturdy. They are light in weight, minimizing postage and shipping expense. They are thoroughly retempered to remove all strains and weak-spots. They are adaptable to a wide variety of colorful caps and closures.

Enlist Kimble in your sampling, packaging and merchandising plans. Consulting with them may save you much time and many dollars.

KIMBLE GLASS COMPANY

VINELAND, NEW JERSEY.

NEW YORK • PHILADELPHIA • BOSTON
CHICAGO • DETROIT



Baker Adds to Its Line of Chemicals

Acetylsalicylic Acid and a Wide Variety of Salicylates

WE are now in a position to offer drug and pharmaceutical manufacturers Acetylsalicylic Acid (Aspirin), Salicylic Acid, and the various Salicylates which meet Baker's high standard of uniformity and quality.

Acetylsalicylic Acid and other Salicylates that are marketed under the Baker label are extremely clean and meet the most exacting tests for purity.

Note Baker's complete line. *Inquiries covering your requirements are invited.*

ACID ACETYLSALICYLIC ACID, U S P
ACID ACETYLSALICYLIC
10% Starch Granulation (Aspirin)
ACID SALICYLIC, NEEDLES, U S P
METHYL SALICYLATE, U S P
SODIUM SALICYLATE, U S P POWDER

Minor Salicylates

Ammonium Salicylate, U S P
Calcium Salicylate
Iron Salicylate, Powder
Lithium Salicylate, Powder NF
Magnesium Salicylate, Powder
Potassium Salicylate, Powder
Strontium Salicylate, U S P Powder
Zinc Salicylate

J. T. BAKER CHEMICAL CO.

Phillipsburg, New Jersey

New York
420 Lexington Ave.

Philadelphia
220 S. 16th St.

Chicago
624 S. Michigan Blvd.

MANUFACTURERS OF

"Baker's Analyzed"

C. P. CHEMICALS AND ACIDS

We removed the Labels

JUST TO PROVE OUR POINT

Parisian names or no names at all, bottles sealed with Armstrong's Artmetal Caps say "class" in a beautiful way.

WE have always had a strong belief that Armstrong's Artmetal Caps play an individual and indispensable part in creating the *quality appeal* of a package.

To prove this point—to our own satisfaction and, we hope, to yours as well—we removed the swanky labels from some bottles sealed with these luxurious caps . . . then had our photographer snap them *au naturel*.

We offer them as Exhibit A. Convincing beyond words is the eloquent beauty of these distinctive caps.

* * * *

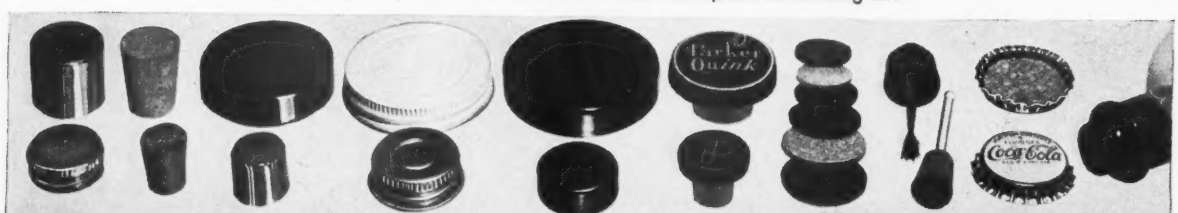
Armstrong's Artmetal Caps are *not* ordinary metal caps! They're made of sturdy brass, in both double and single shell construction (concealed and semi-concealed threads). Their wide variety of finishes includes colored enamel, gilt metal, polished nickel, polished or brushed brass. You can have them plain or with engraved or embossed designs in color.

These caps strongly resist rust and corrosion. The accurately formed threads won't stick.

If you have a product which requires the ultimate in a distinguished closure, then by all means write today for samples and prices of Armstrong's Artmetal Caps or Artmetal Jar Covers. Armstrong Cork & Insulation Company, 913 Arch Street, Lancaster, Penna.

Armstrong's Artmetal Caps

Consider, also, these other closures in the Complete Armstrong Line



Artmetal Caps | Corks and Stoppers | Artmold Caps | Metal Caps, Single Shell | Metal Caps, Double Shell | Embossed Top Corks | Cap Liners | Daubers Applicators | Crown Caps | Cel-O-Seal Caps & Bands

1/3 OF YOUR MARKET

Her skin and that of her daughters needs—and gets—the care of modern cosmetics.

She lives six miles from the drug store and fifteen miles from the hospital. She *must* keep first aid supplies and popular remedies ready for farm emergencies.

She does the buying for ten million families—for 39.3% of the population of the United States.

The farm woman represents one-third of the American market for drugs and cosmetics. One magazine, and one magazine only, is published exclusively for her.

THE
FARMER'S WIFE
Webb Publishing Company
NEW YORK SAINT PAUL CHICAGO

The following concerns are cultivating this great market through The Farmer's Wife:

LEVER BROS. (LUX TOILET SOAP)
SQUIBB'S TOOTH PASTE — UNITED DRUG CO.
LISTERINE TOOTH PASTE — MUSTEROLE
PEPSODENT TOOTH PASTE — SCHOLL MFG. CO.
PARKE DAVIS & CO. — WALKER REMEDY CO.
BAUER & BLACK BLUE-JAY

MALLINCKRODT

New Bismuth Subcarbonate

Two significant tests easily made.

Place loosely small pile Mallinckrodt new Bismuth Subcarbonate on white paper; on same paper place loose piles of other Subcarbonates.

1. Note color in crevices of piles. M C. W. has no yellow tinge, even very faint.
2. Place piles in direct sunlight on window sill. M C.W. remains pure white indefinitely. Others discolor, some immediately, others in four to five minutes.

SAMPLE GLADLY FURNISHED FOR COMPARISON

If you are not using this new Bismuth Subcarbonate, these simple tests will serve to prove the light stability and whiteness;—if you are already using it, the tests will substantiate your choice.

PERMANENTLY PURE WHITE

Even direct sunlight does not discolor it.

A real advantage to PHARMACEUTICAL and COSMETIC manufacturers

WHY?

1 Because it assures no darkening in compatible mixtures no matter how long your product remains in dealer's stock.

MALLINCKRODT BISMUTH SUBCARBONATE REMAINS PURE WHITE.

2 Because it assures uniformity of your finished product in color and physiological action.

MALLINCKRODT BISMUTH SUBCARBONATE HAS A DEFINITE CHEMICAL COMPOSITION—OVER 99.7% as $(BiO)_2\ CO_3$.

ITS BULK AND PARTICLE SIZE IS SPECIALLY STANDARDIZED FOR SUSPENSIONS—ALKALINE MIXTURES—TABLETS—COSMETIC POWDERS.

3 Because it conforms to the Pure Food and Drug standards.

MALLINCKRODT BISMUTH SUBCARBONATE MORE THAN MEETS THE U.S.P. X REQUIREMENTS. IT IS MANUFACTURED FROM AND WITH AMERICAN MATERIALS AND WORKMEN.

Mallinckrodt

CHEMICAL WORKS

Makers of Fine Medicinal Chemicals

MALLINCKRODT CHEMICAL WORKS
St. Louis, Mo., or New York, N. Y.

Please send me a sample of Bismuth Subcarbonate for comparison.

.....Name

.....Address

.....City & State

ST. LOUIS · CHICAGO · PHILADELPHIA · TORONTO · MONTREAL · NEW YORK

Watch the Codes

THOSE who were of the opinion that the Industrial Recovery Act is not going to remove many of the evils of merchandising must have gotten quite a shock by this time if they have followed the codes which are being prepared.

IN THE first place the cotton textile code, which was the first to be approved by the President, will be amended to eliminate the use of hidden demonstrators in the sale of cotton piece goods in retail stores. This is number one of the things which this industry should note.

SECOND, the code which has been prepared by the dry goods stores of the nation specifically states that "it shall be unfair competition to sell or advertise at retail any merchandise at less than the net invoice cost plus ten per cent to insure that labor costs shall be at least partially covered. "The code also covers quite adequately the subject of unfair and deceitful advertising.

WITH these points restricting merchandising tactics being agreed upon by manufacturers and merchants, we can easily visualize a number of changes occurring in the merchandising of drugs and cosmetics. Obviously if loss leaders in drug and department stores are eliminated, the drug store will be a changed institution. Likewise, with the elimination of hidden demonstrators, the cosmetic business will bear close watching. A drug and cosmetic code could easily eliminate entirely the practices of free deals and combination offers; in fact it could eliminate all the practices to which the legitimate retailers and leading manufacturers object.

WE STILL wonder if the salary of the registered pharmacists and clerks are to be greatly advanced as some groups are proposing, and we would like to know just how high this is going to raise the prices of prescriptions if a proper margin is guaranteed on the other products through the elimination of price cutting.

AT ANY rate we are definitely in for a new deal in the drug and cosmetic business, and we are of the opinion that the experiment will be well worth while.

Our Markets

The depreciation of the dollar is resulting not only in increased prices for imported commodities, but also for domestic commodities. This latter increase in prices comes about through the buying caused by the general feeling that the upturn has arrived as well as by the fact that a cheaper dollar is causing a heavier export demand for many of our commodities which is causing the markets for these commodities to strengthen.

Prices of raw materials are of greater importance today than perhaps any time since 1920. For this reason we are extending the statistical feature of our market section so that manufacturers can have at their hand as much data on their various products as is possible.

In the market section of the present issue we present not only our weighted indexes of products used in the various sections of our industry, but we also present this month individual price charts for the fifteen essential oils which comprise our essential oil index.

Following this we shall give individual charts for the individual commodities in the other several groups. We know that this information will prove helpful to buyers, and we should like to have comments as to how we can further improve this service.

● ● ●

The Institute's Job

Cooperation in the drug trade toward the end that prices at retail will be more stable and that those trade evils on the part of manufacturers and others that tend to upset stable conditions will be eliminated, is a most desirable and vital thing. This one thing can be accomplished by the Drug Institute of America if the Institute functions in a proper manner.

However, the Institute must realize that in its membership, and in fact upon its executive committee are many who have never expressed the slightest interest in stable retail prices. Furthermore the Institute must realize that it quite generally is known that the Institute idea was originated by the head of a powerful drug chain.

With these two very definite handicaps, the Institute must be as open as is possible with the retail drug trade in its deliberations. Few independent retailers are going to accept the Institute on blind faith with such a set-up. Some tangible assurance other than words must be given the independent retailers that the Institute is working in their interest as well as in the interest of the manufacturers, chains, and wholesalers who comprise the great majority of its directing board.

For if the Institute does not gain the full cooperation of the independent retail trade it is doomed to failure. Manufacturers will not long display an interest in any association of this sort if it fails to gain the support of its main group of customers. There is certainly no point to a manufacturer joining and supporting the Institute for any other purpose than to indicate his willingness to cooperate in a movement to better conditions for those to whom they sell. The Manufacturers already have sufficient of their own associations, to stop them from joining the Drug Institute if it is composed solely of manufacturers and wholesalers.

● ● ●

New and Non-Official

● ● ●

Have You Heard the Latest Antiseptic?

Scientists have recently learned that bacteria in milk, water, fruit juices and other liquids can be killed by "supersounds" of very high pitch.

If they keep working on this, soon you'll be buying antiseptics on phonograph records.

● ● ●

Silver Threads Among the Gold?

For the particular benefit of those of our readers who are greatly concerned with foreign rates of exchange, we quote from F. P. A. who says that,

"Twenty years ago you could look at U. S. paper currency and say 'Thar's gold in them bills'."

They've Been Keeping it Quiet?

The latest on "Athlete's Foot" is that it's a furtive disease. It seems a shame, too, after all the money spent on advertising it.

We thought it was, by this time, on darn near everybody's lips—Heaven forbid.

● ● ●

The Other Version of the Daniel Boone Story

For no other reason than to please one of our contributors (did we hear somebody say, "The only one") we pass on the story of the negro lawyer who assured his client that he could get a divorce because his marriage was illegal.

It seems the lawyer had discovered that the bride's father had no license to carry a gun.

● ● ●

It's News to Us

Have you heard the story of the literal-minded customer with the good memory who took the new tube of Ivory Shaving Cream and tossed it into the river to see if it lived up to the Ivory slogan.

● ● ●

What a Shoe!

In this department last month we had occasion to comment upon the modern miracle man who takes a crude material at 26 cents a pound, which loses 40 to 50 per cent in refining, yet offers the 100 per cent refined at 30 cents and makes a profit.

In what was practically the next mail, we received letters from five persons, handling widely varying materials, protesting against our divulging trade secrets. Not one of these persons even handled the original material to which we referred.

● ● ●

Ten Years Ago

From our pages, July, 1923

Judging by operations in the first half and orders already on the books, U. S. Industrial Alcohol, after the payment of preferred dividends, is expected to show $10 or more for the common in the current year.

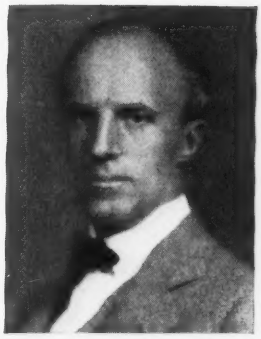
John Powell, formerly sales manager for Arthur Stallman & Co., New York crude drug importers, has started a new company under the name of John Powell & Co. The new company will specialize in insect powder and other imported botanical drugs.

The working force of Sharp & Dohme, manufacturers of pharmaceuticals, Baltimore, represented by the Employees' Relief Association, will hold the annual excursion down the Bay to Tolchester on July 23.

C. C. Concannon has been appointed chief of the Chemical Division, Department of Commerce. Mr. Concannon was formerly an assistant instructor in chemistry in Boston evening high school.

The Industrial Recovery Act

Comparatively few people understand just how the Industrial Recovery will operate to bring about industrial rehabilitation. This address delivered by Mr. Dunn before the American Pharmaceutical Manufacturers' Association is most informative.



By Charles Wesley Dunn

DIVIDED into four parts (1) industrial code of fair competition; (2) limited code of employment conditions; (3) industrial and labor agreements; (4) oil regulation.

Industrial Code of Fair Competition.—Is voluntary or mandatory. A voluntary code is one adopted by a representative industrial association or group for the industry or trade affected and submitted to the President for approval. No voluntary code will be approved unless the association or group submitting it is truly representative of the business affected and imposes no inequitable membership restriction. A mandatory code is one prescribed by the President for a trade or industry having no voluntary code, either upon his own motion or upon complaint that the trade or industry is using practices contrary to the policy of this act. The theory of this alternative voluntary and mandatory code provision is that each trade or industry is given the opportunity to make its own code to effectuate the act's policy, and if it fails or neglects to do so then the President may prescribe it.

Each code (voluntary or mandatory) is subject to certain fundamental conditions. They are:—

1. It will only be approved or prescribed after a public hearing. This means that everyone interested and affected by the code may be heard upon it. Also that no code will be made effective in secret or otherwise than subject to the searching light of publicity.

2. No code will be approved or prescribed unless it tends to effectuate the act's policy.

3. No code will be approved or prescribed that promotes private monopoly or permits such a monopoly or any monopolistic practice. This last is Borah amendment.

4. No code will be approved or prescribed that eliminates or oppresses or discriminates against small business. This means that big business cannot make a code injurious to small business. The importance of this provision is emphasized when it is considered in conjunction with the provision that a representative association or group may make a voluntary code. It is a question of fact whether and when an association or group is representative. This question must be answered primarily from the standpoint of volume and also incidentally from the standpoint of number.

5. The President may insert in any voluntary or mandatory code any requirement, exemption or exception he deems necessary to effectuate the act's declared policy. This provision is effective to give the President complete control over business brought under the act. There is no limitation upon this power of requirement other than his own discretion. For example, salaries.

Guaranties for Labor

6. Each voluntary or mandatory code contains these labor conditions:—

"(1) That employees shall have the right to organize and bargain collectively through representatives of their own choosing, and shall be free from the interference, restraint or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organizations or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection; (2) that no employee and no one seeking employment shall be required as a condition of employment to join any company union or to refrain from joining a labor organization of his own

choosing; and (3) that employers shall comply with the maximum hours of labor, minimum rates of pay, and other working conditions, approved or prescribed by the President."

The first provision is directed to validate the right of organized action by labor and thus to place labor on the same footing as organized business, under the act. The second provision is directed to outlaw the "yellow dog" contract. The third provision is directed to give the President complete control over the maximum hours and minimum wages of labor and other employment conditions in order to effect the fundamental labor purpose of the act. And these labor conditions will undoubtedly inspire wide-spread organization of labor and largely strengthen labor unions. Employers will be powerless to prevent the unionization of employees.

7. Each voluntary or mandatory code must contain an expressed provision that the President may cancel or modify it in his discretion. This provision completes the President's control of a code.

8. The President may prescribe a fee for filing a code.

Legal Effects of Codes

These are the eight basic conditions to which each code is subject. Now as to its legal effect. When the President approves or prescribes a code it becomes the legal standard of fair competition for the trade or industry affected. Hence, the code is in effect a law binding upon all members of that trade or industry. Wherefore, a dissenting minority cannot escape it or avoid its requirements. And the code applies to any transaction in or affecting interstate or foreign commerce. Therefore, it reaches intrastate commerce competing with interstate commerce. A violation is a misdemeanor subject, upon conviction, to a fine up to $500 for each offense and each day of violation is a separate offense. Moreover, the United States district court is empowered to enjoin a code violation; and failure to comply with its injunction decree is subject to a penalty of fine or imprisonment. Furthermore, a code violation is made an offense against the Federal Trade Commission act and the commission is consequently empowered to prevent it by order subject to enforcement by the United States Circuit Court of Appeals. Hence, the government has ample power to enforce a code.

And if the enforcement power stated proves inadequate the President has the final and conclusive power to place any trade or industry subject to a code under license and to prohibit it from engaging in any business in or affecting interstate commerce unless it complies with the requirements he prescribes. This license power in the President is his club to enforce code action under the act. A failure to secure a required license is subject to a penalty of fine (up to $500) or imprisonment (up to six months), and each day of failure is a separate offense. This license power in the President is subject to two important limitations. The first limitation is that it may only be exercised after public hearing. The second is that it expires in one year, or on June 16, 1934.

Broad Effects of Act

This is the industrial code of fair competition part of the act. Upon it I make these comments:—

First—The act extends to foreign commerce. And the President is empowered to prohibit or regulate importations competitively unfair to domestic production operating under a code and because it does so.

Second—The act extends to intrastate commerce in any way affecting interstate commerce. This fact I have previously noted. But it raises a constitutional question later considered.

Third—The act does not define "a code of fair competition." Hence it is what the President approves or prescribes. In its comprehensive conception a code is logically divided into four parts. They relate to labor, production, marketing, and trade practices. The last in the sense of offering economic trade practices and prohibiting uneconomic, unfair and unethical practices. Each code (broadly speaking) must contain a labor part, fixing maximum hours and minimum wages and other improved labor conditions. It should also contain the compensating trade practice part to stabilize business upon a better financial basis. It may further contain a production part to adjust production to consumption and to allocate production. Also a marketing part to regulate and standardize marketing conditions, e.g., by standard cost systems and standard terms of sale.

Fourth—Each code is in the nature of a bargain between the government and business, whereby business is permitted to collectively do certain things to its financial benefit provided it fairly shares that benefit with labor.

Fifth—Each code is necessarily policed by the trade or industry subject to it. And it is for the latter to act for the code's enforcement by reporting the violation to the United States district attorney or to the Federal Trade Commission or to the act's administrator. And each code should contain a police provision. I should note here that the act makes the Federal Trade Commission the President's investigating agency under the act.

Sixth—While the President nominally enforces the act he must necessarily delegate, its actual enforcement to an administrator. He is General Hugh Johnson. In addition there is a special industrial recovery board, broadly supervising the administration of the act, composed of the Secretaries of Commerce (chairman), Agriculture, Labor, and Interior, the Attorney General, the chairman of the Federal Trade Commission, the Director of the Budget, and General Johnson. There are also a labor advisory board, an industrial advisory board, and a consumers' advisory board to see that all three interests are safeguarded in codes approved or prescribed under the act. Hence each voluntary code submitted should be supported by a brief summary statement of the pertinent facts.

Seventh—In administering this act the government will give first attention to the ten major industries employing the greater part of labor. The drug industry is not one of the ten. I understand that the oil, coal, motor, lumber, textile, and steel industries together employ about 70 per cent. of labor. And it is reported that the 1926-27 price and wage level will be used as the standard to administer the act. The President has stated that he hopes that the major industrial codes can be made operative in July or soon thereafter; also, that no acceptable code proposal of any trade group will be delayed. Just when a code submitted by our branch of the industry will be considered I cannot now say.

Eighth—While no provision is made in the act for a court review of any code believed legally objectionable, nevertheless the right of such review by the United States District Court exists in any event.

Limited Code of Employment Conditions:—The second part of the act provides for a limited code of employment conditions. The provision is essentially this:—The President shall, so far as practicable, afford every opportunity to employers and employees in any trade or industry to establish by mutual agreement maximum hours of labor, minimum rates of pay, and other conditions of employment necessary to effectuate the policy of this act, which standards, when approved by the President, have the legal effect of a code of fair competition. If this is not done, then the President, after investigation and hearing may prescribe these standards. This part of the act is directed to secure the fundamental labor purpose of the act if a broader industrial code is unnecessary or impracticable.

Industrial and/or Labor Agreement.—The third part of the act authorizes the President to make or approve trade or labor agreements to effectuate the act's policy. This provision is designed to permit action by agreement rather than by code, to carry out the act, if this is deferred or desired. Such an agreement is enforced by the exercise of the President's license power.

The fourth, or oil regulation part of the act, I will not discuss. Therefore, I now come to the important general provisions of the act. They are:—

General Provisions

First—The act terminates two years after the date of its enactment or sooner if the President, by proclamation, or Congress by joint resolution shall declare its emergency at an end. Hence, the act ends on June 16, 1935, at the most. But the act is experimental as well as emergency legislation, in character. It expresses a new and radically different public policy of business regulation. And if and to the extent this policy proves more successful than that heretofore expressed by the anti-trust law, then it is likely to introduce permanent legislation accordingly. In my view this law is the beginning of an era of closer government regulation of business to secure its greater economic stability and larger social service.

Second—The act provides that while it is effective and for sixty days thereafter (i. e., for the maximum period of about twenty-six months from June 16) any code or agreement or license under the act and any action complying with such code or agreement or license shall be exempt from the anti-trust laws of the United States. This provision is the heart of the act, since its whole point is to permit and validate concerted industrial action necessary to effectuate its policy, notwithstanding such action violates the Federal anti-trust law.

Third—The act does not repeal the marketing agreement provision of the agricultural adjustment act and it provides in effect that in order to avoid administrative conflict between the two acts the President may delegate his power under this (the industrial recovery act) to the Secretary of Agriculture, as to trades and industries handling any agricultural commodity or product thereof or any competing commodity or product thereof. The marketing agreement provision of the agricultural adjustment act is that the Secretary of Agriculture may make such an agreement with handlers of an agricultural commodity or product thereof in interstate or foreign commerce, which agreement is exempt from the anti-trust law. It follows that the two acts are essentially similar in permitting approved concerted industrial action as to such commodities and products.

Fourth—The act authorizes the President to establish a planning and research agency to aid him in carrying out this act. This provision affects the long advocated national economic planning upon the basis of which the act will be administered.

This then is the act and its provisions. We have next to consider the constitutionality. And it presents two major constitutional questions.

Fundamental Purpose

In its ultimate economic conception the fundamental purpose of this act is to ameliorate labor conditions. The principal purpose is to increase and spread employment and to raise wages. And by doing so to create a national purchasing power which will induce and maintain business prosperity. In short, the act is directed to benefit labor to stimulate business recovery and, conversely, to stimulate business recovery to benefit labor. And this fundamental purpose is social as well as economic in character. It is social in the sense that the act is designed to remedy the grave social problem of unemployment and of overwork and underpay, to provide an adequate income for the masses and to enhance their standards of living and to give labor a larger share of the income from business. In this conception, business is viewed as an instrument of social service, and therefore to be used to enhance the general well-being, prosperity and happiness. In this conception it does not exist to exploit workers and consumers, but to promote their best interests. Thus this act supplements the farm relief law. That law is directed to raise farm prices and thus both to place the farm industry on a profitable basis and to sustain the purchasing power of this large part of our population. With

labor and the farm industry upon a prosperous basis business prosperity must follow.

Finally, the act expresses a fundamental change in public policy toward business. Until now our economic order has been established by the anti-trust laws. It was an order of unrestricted competition in all essential respects of production and sale, subject only the statutory injunctions against monopoly, combinations in restraint of trade, and unfair competition. It was an order of individualism otherwise unrestrained. It was an order that had great advantages. It was designed to preserve the right of individual opportunity and freedom to protect small business from suppression by big business, to protect the public from artificially enhanced prices fixed by arbitrary concerted business action. And this purpose was measurably accomplished.

But it was an order that also had grave disadvantages offensive to the public interest and welfare. It compelled ruthless and expressive competition. It resulted in overproduction which undermined the stability of business. It resulted in uneconomic price competition which also undermined the stability of business. All to the injury of producer, dealer, worker and consumer alike. Labor suffered from unemployment resulting from this want of business stability and from the excessively long hours of labor and excessively low wages resulting from unrestricted competition. Producers suffered from the inevitable consequences of overproduction. Dealers suffered from the inevitable consequences of uneconomic price competition.

Comparative Effects

This law introduces the order of government control of business, which can be as complete as the President desires. It is designed to regulate competition, to eliminate what is uneconomic. It will have the resulting advantages to labor, business, and the public at large. But it will have the disadvantages that will attend a bureaucratic regulation of business. Which order will be the best only experience can determine. I for one am convinced that we must regulate competition to secure its economic operation.

I appreciate the danger of unduly increasing prices by this law. I appreciate the great difficulty of its administration measured by the magnitude of its application. I appreciate the vast and complex police problem it presents. I appreciate what it may do to increase and establish union labor. But looking to the great purpose of the act to stabilize business and improve labor conditions, I can see it realized. And if that is so, then these inevitable problems can be solved.

Opposing Arguments

It is argued, on the other hand, that this act involves an unconstitutional regulation of intrastate commerce. And in support the decision of the supreme court in the child labor case (1918) (Hammer v. Dagenart) is cited. In that case the supreme court held unconstitutional a Federal act prohibiting interstate commerce of goods made by child labor upon the ground that manufacture in a State is not interstate commerce. But the decision was by a five-to-four vote.

These cases suffice to show the opposing arguments upon the constitutional question. And doubtless the supreme court will soon be called upon to decide it. It is my opinion that the court will sustain the statute upon the theory stated in the Shreveport cases; also upon the incidental theory that the present grave economic emergency endows private business with a public character subjecting it to closer government regulation than might ordinarily be constitutionally permitted. It is hardly conceivable that the court will destroy this act for narrow, technical, constitutional reasons when there are sufficient constitutional reasons to sustain it now in its record.

New Era of Control

Let us assume that this act is valid, and the supreme court so holds. Then the act introduces a new era of Federal control of business. In this era that control of business may be comprehensive and exclude any State interference with it. And the legislative power of the States to regulate intrastate commerce will be reduced to the status that it can only be exercised subordinately to the legislative power of Congress and so as to supplement or complement that latter power. For example, if this act is valid and applied to permit combinations in restraint of intrastate commerce, then all the State anti-trust laws prohibiting such combinations are in effect nullified. In short, this era introduces a centralized government of business in Washington, with Congress the dominating force to comprehensively regulate business, and reduces State legislation to a subordinate basis.

Second—Another constitutional question is whether the act is valid in its provision empowering the President to license any and all business in or affecting interstate commerce, to effect a code or agreement under the act. The argument against its validity in this provision is principally based upon the recent decision by supreme court in the Oklahoma ice case (1932), in which the court held that Oklahoma could not constitutionally require a certificate of public convenience and necessity as a condition to enter the ice business in that State. This upon the ground that the right to enter a legitimate business is a constitutional one.

But, in my view the supreme court will sustain the license provision under consideration and easily distinguish it from the Oklahoma requirement. For the provision is not absolute but contingent upon making a code or agreement of fair competition under the act effective. If Congress has the power to provide for such a code or agreement, it certainly must have the supplemental power necessary to enforce that code or agreement. This license power is precisely the same as that involved in a Federal act conditions interstate commerce in foods or drugs upon a Federal license or inspection directed to secure the purity, quality, or potency of these products.

Tooth Powders

There is a very definite swing toward the marketing of tooth powders. This article gives the ingredients and methods of preparation of many types of these products.

THERE appears to be a general awakening to the possibilities of tooth powder. Although sales are still far behind pastes, the last three years have shown a steady increase in the consumption of powders. Possibly this may be due to the widespread advocacy of powders by members of the dental profession or it may be due to a belief in the economy and efficiency of tooth powders. At all events the trend is emphased by the increase in the number of perborates recently placed on the market by various firms. Indeed the trend has attained such force that several of the large firms which heretofore sold only paste are adding powder also. It appears that there always will be a very wide market for both. Possibly sales of paste will decline as powders continue to increase. Chemists and production men will welcome this situation because powders are very much easier to make and package and less liable to reactions that cause hardening, sweating, separation and all the other difficulties to which improperly compounded pastes are prone.

The first requisite of a good tooth powder is that it shall not be gritty. It must cleanse and polish the teeth well. It must not tend to coagulate or become gummy in the mouth. It must not taste earthy. It must be pleasantly flavored. It must leave a pleasing aftertaste in the mouth. It must whiten the teeth. It should be free from all harsh abrasives. And it should be packaged conveniently.

Among the materials which have been used for making tooth powders are: precipitated chalk, light and heavy, talc, tri calcium phosphate, kieselguhr, fullers earth, kaolin, magnesium carbonate, cuttlefish bone, pumice, titanium and tin oxides, pulverized soap, carnauba wax, milk and confectioner's sugars, magnesium oxide, potassium bitartrate, orris root powder, starch. To these may be added a wide range of flavoring materials and the various antiseptics which the chemist may think desirable to include. In general any white, chemically inert powder of 200 mesh will be suitable as cleansing, abrasive and polishing agent. Some authorities insist that soap plays but little part as a cleansing agent, but functions rather as a lubricant. Cleansing, they say, is accomplished by attrition through rubbing the teeth with the brush and the inert materials. However, the main point is to make the powder pleasant and easy to use and to make sure that it cleanses and polishes the teeth well.

Fullers earth, kieselguhr, and kaolin are restricted to acid dentifrices which are usually colored. Many chemists frown upon them altogether because of their earthy character. Cuttlefish bone and pumice are also in bad favor because they are said to be too abrasive and hence injure the enamel. The most widely used and favored basic material is of course *precipitated chalk.* This cleanses the teeth thoroughly and polishes them well without in any way injuring the enamel.

Among the flavors commonly favored the following are typical—those containing wintergreen being somewhat more highly regarded for powders.

NO. 1

Oil of cinnamon	2.5 cc.
Oil of clove	.5 "
Methyl salicylate	8. "

NO. 2

Oil of spearmint	1. cc.
Menthol	.5 gram
Methyl salicylate	8. cc.

NO. 3

Oil of cinnamon	2 cc.
Oil of peppermint	2 "
Oil of clove	3 "

NO. 4

Oil of anise	2 cc.
Oil of cinnamon	2 "
Oil of peppermint	1 "
Methyl salicylate	5 "

In presenting the following suggestions for inspection and testing we wish to emphasize that they are given only to illustrate relative proportions and manufacture and are not recommended to be used as finished formulas.

The following are alkaline or antiacid tooth powders:

NO. 1

Titanium dioxide	115 grams
Calcium carbonate heavy	600 "
Pulverized neutral white soap	100 "
Sodium carbonate monohydrated	140 "
Flavor (oil of wintergreen)	18 cc.

Procedure: Rub up the oil with part of the calcium carbonate until finely dispersed. Add the other ingredients and mix thoroughly. Sift.

(*Continued on page 46*)

A. P. M. A.

Carl N. Angst

E. S. Paisley

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Counsel
Charles Wesley Dunn,
New York.

UNDER the able assistance of its Counsel, Charles Wesley Dunn, the American Pharmaceutical Manufacturers' Association at its recent meeting in Chicago, tackled the task of preparation of a code of fair competition for submission to General Johnson, enforcement official of the National Industrial Recovery Act. Present at the executive session at which the code was discussed were Horace W. Bigelow, Counsel of the American Drug Manufacturers Association and Carson P. Frailey, Executive Vice-president and Secretary of the same association. Associate members were also admitted to the meeting for the reason that many of the associate members of the A. P. M. A. are active members of the A.D.M.A., and it is hoped that a common code can be worked out for the two associations.

The twenty-sixth annual meeting of the association was held at the Edgewater Beach Hotel, Chicago, June 21-23. At the first session President John G. Searle delivered his address. Excerpts:

"Regardless of political party affiliations, personal likes or dislikes, I think we must all agree since March 4 of this year there has at least been a very definite and positive attempt to change the drifting policy we were following.

"Our industry has certainly come in for its share of attention in the new plan. Not only will we naturally be expected to put our house in order through the national industrial recovery act, but it appears quite likely that we will be working with an entirely new plan of marketing goods in the proposed new food and drugs act.

"I am glad to see President Roosevelt does not consider the revision of the food and drugs act as an emergency measure for certainly in my opinion it is anything but that. There is no doubt that, generally speaking, the pure foods and drug act of 1906 has brought about many blessings to our nation. Let it be remembered, though, that it was the legitimate food and drug people themselves that primarily were instrumental in writing this act and it is they that have been consistently in sympathy with and supported it through these many years. It is very possible there are fallacies and loopholes in the present law, but isn't it the case with any man-made instrument? What we do know is that, generally speaking, this act has done a good job in protecting the people over a great number of years and as a consequence, before it is discarded the

In Session

act to take its place should be carefully and thoroughly reviewed and every interested party should be given an opportunity to see that it is drawn to the very best possible interest of the consuming public.

"The primary difficulty with the present act as I see it is that it allows for too much interpretation in the hands of one individual or a small group of individuals. As I have construed the meaning of the new act this fault is not corrected in it.

"It must be remembered the practice of medicine and the care and treatment of the sick is not a true science. The art of healing and its many adjuncts has developed slowly and irregularly over the centuries. Certainly we know since the beginning of what is now known as modern medicine its followers have been honest and conscientious in their beliefs. I am sure it can be said those who were leaders of medical practice two hundred years ago conscientiously felt they were using the best means possible to accomplish their end. I am sure this can be said equally truthfully today. However, it is just as true now as it was in days gone by that there is a tremendous difference of opinion as to what constitutes rational treatment.

"Medical literature is full of contradictions. I believe I am safe in saying there is not a paper read on the practice of medicine, regardless of the authority presenting it, that cannot and will not be equally as authoritatively denied by some practitioner. Therefore, to leave the judgment as to what is a correct therapeutic claim to the mind of one individual or to even a group of several prominent ones, in my opinion is wholly unfair, not only to the person presenting such a claim but to the individual that feels that he is obtaining results from the use of such a product. Of course, there are many therapeutic agents that have been thoroughly studied and on which there is more or less a general medical agreement, and to have an item of this sort flagrantly mislabeled is decidedly incorrrect. On the other hand, there are many, many borderline cases, and I would like to suggest the new act provide for this by the establishment of a representative review board so that definite rulings can be given in these debatable cases, and that the matter of the intention of deceit or fraudulent use be given careful consideration before any court action is taken in a case of this sort."

The report of Ralph R. Patch as Chairman of the Committee on Returned Goods, contained the following information:

John G. Searle

C. W. Warner

RESOLUTIONS

Drug Institute

Resolved:—That the American Pharmaceutical Manufacturers' Association approves the constructive purpose of the Drug Institute of America. The due realization of that purpose will greatly benefit the drug industry by promoting its economic stability and social service.

Foods and Drugs Act

Resolved:—That the American Pharmaceutical Manufacturers' Association approves a sound and constructive revision of the Federal food and drugs act; and be it further

Resolved:—That the Association reiterate its previous approval of the amendment of the act to prohibit false or misleading advertisements.

Code of Fair Competition

Resolved:—That the American Pharmaceutical Manufacturers' Association collaborate with the American Drug Manufacturers' Association to establish a code of fair competition for the industry represented under the national industrial recovery act.

Appreciation

Resolved:—That the American Pharmaceutical Manufacturers' Association does hereby record its grateful appreciation of the distinguished and able administration of President John G. Searle during the past two years, which has elevated the association to the highest plane of service to the industry attained in the history of the association.

"The economic conditions prevailing during the last three years have without been responsible for an increase in the percentage of returned goods.

"Most members believe it advisable to remove from the market promptly all of their products or packages which are not in a condition in which they would want them to go to the consumer. The opinion is unanimous that we should accept for full credit packages showing deterioration of any kind which is the fault of the manufacturer."

In the case of products which have deteriorated on account of faulty storage or handling by the customer, or on account of accident while in possession of the customer, there is quite a difference of opinion.

"The members of the American Drug Manufacturers' Association have experienced the same increases in returned goods. They requested that a joint committee be appointed to see if a program could be worked out which might be effective in reducing the percentage of returned goods. This joint committee has had one meeting. Three principles were agreed upon for recommendation to the two associations. At our winter meeting in Detroit, the association voted to approve these three principles and recommend their adoption by each member of our association.

1. No open packages (partly emptied containers or those from which the cork, cap or label originally attached has been removed) to be accepted for credit. (Except in cases where deterioration due to faulty manufacture could not be discovered until the package was opened.)

2. Stocks damaged by fire, smoke or water to be received only on the basis of salvage value, (with remainder to customer to enter claim with insurance company).

3. No returned goods received during December.

"The first two principals were later adopted by the A. D. M. A. so these may be accepted as the prevailing practice in our industry. The third principle was not adopted by the A. D. M. A., so should be considered optional."

A fourth principle approved by the association at the Detroit meeting was:—

4. Stocks from estates of physicians to be received only on the basis of salvage value.

"One source of annoyance to manufacturers at the present time is the return of goods in salable condition because the customer finds himself overstocked. It seems impossible to adopt any definite policy to cover all these cases. The overstock may be due to the customer's poor judgment in buying or to poor judgment of the salesman in selling, or it may be due to circumstances beyond the control of either one. The manufacturer may be glad to have the merchandise returned to balance an account. This seems to be an evil which must in many cases be tolerated, and in any event, handled by the various manufacturers as circumstances dictate. When conditions become more normal, it may be possible to set some policy to cover such cases. Your committee recommends that unless there is definite evidence that the manufacturer is responsible for the overstock, the customer should be charged for transportation and a further charge of ten per cent. for handling or reconditioning.

"Such charges will tend to discourage customers from taking advantage of the return privilege on salable goods."

At the afternoon session of the first day, Charles Wesley Dunn discussed the Industrial Recovery Act. This discussion is given on another page of this issue.

Following this the session was turned over to Dr. H. Sheridan Baketel, who introduced the speakers in a symposium on the trend of medicine.

Dr. Charles J. Whalen, editor of the "Illinois Medical Journal," who said that the medical profession has been fighting a socialization trend since 1907. State medicine, he said, would nullify the scientific efforts of the medical profession and make the practice of medicine wholly an economic undertaking.

Dr. Paul Nicholas Leech, of the American Medical Association spoke on "Pharmaceutical Products of the Future." Better standardization of pharmaceuticals is necessary, he said, as well as a more definite unit with which to label vitamin products. Fish oils, stated the doctor, will largely be replaced in five years as a source of vitamins by irridated milk. Preparations of the future will be used as adjuncts to physical chemistry treatment, due to the great future in the study of cells and physical chemistry.

Dr. H. Sheridan Baketel gave a very interesting talk on medical practice in 1950 forecasting the end of the period of intense specialization by physicians.

Sales problems were discussed at the final session of the meeting under the chairmanship of M. J. Brown, of Pittman-Moore Co. Mr. Brown presented a threefold problem: Getting new accounts; increasing business from active accounts; reviving inactive accounts.

The importance of proper sample cases for salesmen was discussed at some length with various members telling of their experiences in this direction.

Robert R. Spaulding, of G. D. Searle & Co., discussed selection of salesmen, saying that he prefers men between twenty-five and thirty-five years of age without experience, or experienced men up to forty-five years of age. New salesmen are given training for a week at the home office, and after he has been in the field for one or two months, a district supervisor works with him for three days.

Foot Preparations

An important part of the market constitutes preparations for relief of untoward conditions of the feet. This article indicates the ingredients of the various types of products.

First there are preparations for excessive perspiration of the feet. Solutions of various chemicals have been proposed. These include formaldehyde, tartaric acid, aluminum acetotartrate, chromic acid and like. Chromic acid is an effective product but should not be used, says Ly, because it is poisonous. Formaldehyde is similarly not advisably used for long periods of time, because under these conditions it can harm the organism. The first procedure in treating excessive perspiration (hyperhidrosis) is to keep the feet scrupulously clean. After the feet have been washed with cold water and dried, the perspiration-controlling liquid is applied. Excessive application of the chemical does not however improve conditions; it makes matters worse.

Solutions for rubbing into the feet may be a 2 to 10% formaldehyde solution, containing as well 30% eau de cologne and sufficient distilled water to make 100%. Another solution contains 5 to 10% of 50% concentrated solution of aluminum acetotartrate, 15% of eau de cologne or 10% of alcohol, (if there is no object in perfuming the preparation) and sufficient distilled water to make 100%. Other preparations are eau de cologne with 50% alcohol content, containing 2 to 3% acetic acid (80% concentration); 6% borax, 6% salicylic acid, 3% boric acid, 40% glycerin and 45% alcohol (70%). The latter solution is rubbed in very dilutely. Solid perspiration correctives, particularly useful in travelling, are usually made with aluminum acetotartrate. The powder is dissolved in proportion of one to three parts of the powder to 100 parts of water. More dilute solutions are employed for washing the feet.

Foot powders for controlling perspiration contain 3% of paraformaldehyde, 5% of tannic acid (technical tannin powder), 10% powdered boric acid, 12% of magnesium carbonate, 10% precipitated chalk, 20% magnesium stearate and 40% talc. Also, 4% salicylic acid, 12% sterilized powdered kaolin, 8% magnesium carbonate or magnesium stearate, 16% zinc oxide (green seal) and 60% talc; or 5% salicylic acid, 10% boric acid, 10% powdered tartaric acid, 35% zinc oxide (when price is not the main object this is advantageously replaced by titanium dioxide) and 40% talc. In order to give the powder deodorizing properties 10% of sodium perborate is added in a mixture of talc, magnesium carbonate and zinc oxide. Various plant raw materials, such as rice starch powder, wheat starch powder, ground orris root and the like, may not be used in making these preparations. They decompose with the perspiration and increase the acid action on the skin.

Preparations for impregnating hose are mostly solutions of tartaric acid, a 3 to 5% solution being sufficient. Ten to 20% formaldehyde solutions may also be used. The hose is merely steeped in the solution and allowed to dry. Foot powders may be used to powder the hose if desired. Running wounds on the feet, particularly between the toes, can be treated with salicylic acid salves, zinc oxide salves and also by washing with a solution of quinosol in water (one part of quinosol to 1,000 to 2,000 parts of water). Skin of the feet inflammed by sunburn may be treated with a healing powder consisting of 10% pulverized bismuth subnitrate, 5% pulverized anaesthesin, 20% magnesium stearate and 65% talc.

Foot bath preparations are of several types. One preparation contains 40 parts each of sodium bicarbonate and sodium carbonate, 10 parts each of powdered soap and borax, 0.2 part of lavender oil, 0.1 part of bergamot oil, two drops of neroli oil, 5 drops of jasmine oil and one drop of artificial rosemary oil. A foot bath powder of the pineneedle type, which also has a perspiration controlling effect, is made by mixing 25 parts of salicylic acid with 50 parts of boric acid, 50 parts of tartaric acid, 375 parts of sodium bicarbonate and 500 parts of borax. This preparation is perfumed with 0.5 part of coumarin, 0.5 part of oil of eucalyptus, one part of cintrollol oil, one part of oil of bergamot and 7 parts of templin oil.

The simplest type of foot bath powder, however, contains 10% pulverized borax, 40% sodium bicarbonate powder and 50% calcined soda, so-called 98/100% ammonia soda. The powder may be perfumed to taste with any composition resistant to alkalies. This preparation softens the callous. Another simple formula for a powder containing soap is 20% finest grade of curd soap mixed with 20% refined borax is very fine powder and 60% calcined soda. Granulated foot bath powder contains granulated sodium bicarbonate mixed with medium-fine ground soda crystals. This powder must be packed in air-tight packages so that its condition is not changed by contact with air. Tannin foot powder

is prepared from 40% technical tannin and 60% pulverized borax. Pure tannin alone may be used. This powder controls perspiration, acting as an astringent, and aids in healing wounds.

The typical oxygenated foot bath powder consists of soda, sodium bicarbonate, small quantities of other substances such as oxygenated salts, radiocative substances and aromatics. Some perparations contain about 6 to 7% of sodium thiosulfate (hyposulfite). Lithium salts are also used. One formula calls 180 parts sodium perborate, 60 parts boric acid powder and 200 parts sodium bicarbonate; another for 400 parts sodium perborate, 400 parts sodium bicarbonate and 250 parts borax powder; still another for 200 parts sodium bicarbonate, 150 parts soap powder, 300 parts borax powder and 350 parts sodium perborate. Fifty parts sodium thiosulfate powder are mixed 300 parts sodium bicarbonate, 400 parts borax powder and 250 parts sodium perborate. In each case the powder is perfumed with 10 to 20 parts perfume composition. The well mixed preparation is screened and filled into cartons. Tablets may also be prepared from these mixtures.

Triethanolamine is used in making foot bath liquids. One mixture contains 10% triethanolamine, 22% distilled olein, 28% alcohol or isopropyl alcohol and 40% pineneedle oil (or a mixture of various oils of conifers, such as firneedle oil, pineneedle oil, templin oil, oil of silver fir; also lavender oil, rosemary oil and oil of bergamot). The ratio of triethanolamine to olein must not be changed. However, the proportions of alcohol and perfume compositions may be changed. Due to the fact that the triethanolamine-olein soap does not contain any free water, a clear solution is obtained even though the essential oils are added in large proportion. When this preparation is diluted with water, the triethanolamine oleate forms a very fine emulsion with the essential oils, so that drops of oil do not separate from the solution.

Special foot preparations are made for treating abnormal conditions of the feet. A preparation for softening and removing cuticle is made as follows. Pure sodium hydroxide solution of 10°Be. concentration or a mixture of 12% hydrogen peroxide, 30% by weight strength, and 88% borax solution, 5% strength is prepared with distilled water. This preparation does not keep long. A solution of 2.5% caustic potash sticks in 15% glycerin, 28°Be. concentration is made with 5% alcohol and 77.5% distilled water. When the glycerin is substituted by triethanolamine, the softening action of the preparation is increased. A highly concentrated sodium carbonate solution may also be used to soften the cuticle. After these preparations are used, the skin should be neutralized with a solution of tartaric acid or citric acid. Vinegar or lemon juice may also be used for this purpose.

Corn plasters are commonly made with emplastrum saponatum salicylatum with or without the addition of Indian hemp extract. The latter alleviates the pain caused by the salicylic acid. Corn cure tincture (green in color) contains 1% Indian hemp extract, 2.5% acetic acid, 10% larch turpentine, 5% castor oil, 10% salicylic acid, 30% spirit of ether and enough 4% collodion solution to make 100% in all. This tincture does not gelatinize as readily as ordinary corn cure collodion. Colorless corn cure collodion is made with 10% salicylic acid, 10% anhydrous thick turpentine (larch turpentine) and sufficient 4% collodion solution to make 100%. Also 8% salicylic acid, 10% chemically pure lactic acid and again sufficient 4% collodion solution to make 100%. The addition of 1 to 2% of Indian hemp extract improves the preparation. This preparation has a characteristic green color, which is duplicated in cheaper preparations by the addition of alcohol-soluble chlorophyll.

Corn cure salves as well as salves for treating caloused skin may contain white, unadulterated potash soap as the base in which is incorporated 15 to 20% of salicylic acid. Or 6% of rosin, 8% of salicylic acid, 6% of balsam Peru, 10% of anyhdrous larch turpentine, 50% of beeswax and about 26% of white oil are worked up into a salve. Salicylic acid-soap plasters may also be prepared with the addition of vegetable oils.

Preparations for strengthening the feet may be of the pineneedle-alcohol type. In this case 0.1% of ethyl acetate, 0.2% of sweetened spirits of niter, 0.4% of oil of silver fir (free from sesqui terpenes), 55% of 95% ethyl alcohol, 1% essence of whiskey, and 43.3% of distilled water are mixed together to form a solution. This preparation is colored a light green with chlorophyll. Eau de cologne with an alcohol content of 40 to 50% serves for the same purpose. A foot massage cream may be prepared from 30% protegin, 1% lanolin, 1% of white beeswax, 5% of ceresin, white 10% white oil, 1% true or synthetic camphor and 52% of distilled water.

We Apologize

Editor,
The Drug and Cosmetic Industry,

Dear Sir:

I have just finished reading your splendid article on page 506 of the June issue of "The Drug and Cosmetic Industry."

I desire to call to your attention the misstatement in the first sentence of the second paragraph, "Drug Institute idea was taken up by A. Kiefer Mayer of the Kiefer-Stewart Company, Indianapolis, service wholesaler who also owns a chain of stores."

I admit I am a service wholesaler but I have to decline ownership to a chain store. Neither does my company own a chain of stores. We have never been fortunate to be in the profitable end of the drug industry.

This misstatement in regard to owning a chain of stores has caused both the company and myself embarrassment not only in our local market but in several places over the United States, and inasmuch as we are wholesalers and not retailers, would appreciate your correcting this statement in your next issue.

Thanking you for your consideration, I am

Sincerely,

Indianapolis, June 16, 1933. A. KIEFER MAYER.

What's New in Medicines

Europe continues to produce medicinals of new composition. These indicate the trend of therapeutics abroad.

Inhepton—In boxes containing 50 and 100 ampoules. Tonic compounded on organotherapeutic principles. Contains anemia-alleviating principle of liver for injection with addition of stimulating, tonic and strengthening effects of strychnine and phosphorus. Treating secondary anaemia, for example anaemia resulting from excessive bleeding of wounds, toxis and constitutional anaemia as well as chlorosis (to act as auxiliary medicament along with iron therapy); furthermore in convalescence and the like; also for treating true pernicious anaemia. Dose, 20 injections, one cc. each intramuscularly. E. Merck, Darmstadt.

Jecorol—Capsules containing two grams each, 24 in box as well as in bottles containing 500 and 1000 grams. Lofoten crude cod liver oil with particularly high vitamin D content, equivalent to content of vitamin A in medicinal cod liver oil. Dr. Maddaus & Co., Radebeul-Dresden.

E. K. Draggen Buerger—Small, yellow, sugar-coated pills, each containing 0.8 mgm. parathyroid substance in dry form. For hypoparathyreoidismus, parathyreoipriver and stomachic tetanus, eclampsy, epilepsy, osteoporosis; mainly in disturbances of mineral metabolism; also in skin diseases such as psoriasis, urticaria, eczemas, toxicodermia, neurodermatoses; also acts on pH concentration of blood in cancer therapy. Small quantity of preparation, administered by mouth, has affect of blood calcium level. In cases of patients with abnormally low calcium titer, latter can be increased and an anti-tetanic action produced. Dose one or more pills three times daily. Johannes Buerger Ysat Fabrik Wernigerode a. H. G.m.b.H., Wernigerode, Germany.

Eudyna—In metallic boxes containing 100 and 250 grams. Blood and nerve food. Contains particularly hormones and enzymes of stomach in natural form and also extracts of central nervous system prepared by special process, also liver and bone substance, vitamins A, B, D and E, all cellular and tissue-forming minerals of bones and gristle substance, particularly calcium compound, acid calcium-magnesium double salt of inosite-phosphoric acid (22% phosphorus in organic combination), highly potent, physiological-active iron-silicon salt, albumen of vegetable embryoes, milk and grape sugar. For all conditions of exhaustion after severe, enervating diseases, all weaknesses and nervous phenomena, loss of appetite, disturbances of mineral metabolism in convalescence. Institut fuer angewandte Hygiene G.m.b.H., Hamburg, Germany.

Eukasan—Green, long bonbons filled with liquid and wrapped in parchmentized paper. Contains refined sugar, true Japanese menthol, glucose and eucalyptus oil. Palliative in treating colds, catarrhs, respiratory passages chocked with mucous secretions, etc. Heinze Schokoladen & Zuckerwarenfabrik A.G., Eilenburg.

Extractum Parathyreoideae Ifah—Ampoules in boxes containing 30, each ampoule containing 1 cc. parathyroid preparation adjusted to Collip hormone units. Hormonal strength of action of calcium substitution therapy in diseased or functional disturbances of parathyroid (tetanus, chorea, osteomalagia) is increased by this preparation. For secretive disturbances in stomachic and intestinal canal, ulcerations, articular rheumatism, Raynaud's disease; increases blood calcium level; treating dermatoses, eczemas, urticaria, psoriasis during pregnancy and period of lactation. Institut fuer angewandte Hygiene G.m.b.H., Hamburg.

Calcio-Coramin—Tubes containing 16 and 24 tablets, each weighing 0.4 gram, well-crystallized, water-soluble compound formed from two molecules of pyridin-beta-carboxylic acid diethylamide and one molecule of calcium sulfocyanide. Its formula is $C_5H_4N.CON(C_2H_5)_2$. $Ca(CNS)_2+2H_2O$. For oral treatment of bronchitis, catarrhal congestion, bronchial pneumonia, emphysemia, pulmonary oedema, pulmonary abscesses, bronchial asthma, cardiac neuroses, angina pectoris, endocarditis, myocarditis; also in treating decompensated conditions of the heart, cardiac insufficiency post-infection myocarditic troubles (grippe, etc.) as well as an analeptic in over-strain of the body and in threatened heat prostration. Dose, three times daily, one to two tablets allowed to decompose in water, taken after meals. Ciba Berlin Aktiengesellschaft, Berlin-Wilmersdorf, Germany.

Calcium Ifah Granula—Contains 50% calcium lactate. Treating particularly disturbances of nutrition and avitaminoses, cardiac troubles, pulmonary diseases, intestinal diseases and disturbances of the functioning of the kidneys. One hundred and 250 granules in folding boxes. Institut fuer angewandte Hygiene G.m.b.H., Hamburg.

Calcium Ifah Pro Injectione—Boxes containing two and 10 ampoules, holding 5 cc. each and 1, 5 and 20 ampoules holding 10 cc. each. Isotonic solution of calcium gluconate and calcium thiosulfate. For acute bleeding, tetanus, asthmatic troubles, poisoning and cardiac diseases. Same maker.

Calcium Sandoz Syrup—Calcium Sandoz in concentrated syrup form. One tablespoonful corresponds to four grams of Calcium Sandoz. In bottles containing 100 and 250 cc. Sandoz A.G. Chemische Fabrik, Nuernberg, Germany.

Canozyl—Powders weighing 0.44 gram each. Contains magnesium salicylate. Analgesic in headaches, toothaches and muscular pains; also in gout, rheumatism and grippe.

Gastrocalcine—Granular form. Contains 10 grams calcium carbonate, 5 grams magnesium carbonate, 5 grams sodium bicarbonate, 100 grams sugar and 0.2 gram anise oil. Tinardon, Paris, France.

Hypolyse—Contains extract of mistletoe, extract of valerian and sodium nitrite, each .05 gram per gram of compressed tablet. Treating conditions of hypertension. Bitboul, Paris, France.

Donagol—Concentrated solution of zinc chloride, 45%. Feminine hygiene. C. Thomas, Peronne, France.

Poehlin—Clear, yellowish-brown liquid of good odor. Flasks containing 30 grams. Also tablets in tubes of 50, each weighing 0.3 gram. Ampules, 2.2 cc. capacity for intravenous injection. Contains tonic and strengthening active essential principles of testicular and reticular endothelia. Biological tonic as omnicellular alterative of organism, for loss of energy, exhaustion; for neurodynamic increase of stamina in neurasthenia, etc. Dr. von Poehl & Soehne Organotherpen Institut, Berlin, Germany.

Quadro Nox—Capsules. Greenish-yellow gelatin capsules containing diethyl-barbituric acid and quadronal (caffeine) in ratio of 4:1. Each capsule contains 0.25 gram powder. Powder dissolves in duodenum and acts in about four hours. For insomnia and inadequate sleep without post-hypnotic effects after wakening and other secondary reactions. Can be used before and after operations to lengthen sleep without injurious action on heart and breathing centers. Administered in aterio-slcerosis. Asta A.G. Chemische Fabrik, Brackwede, i. W., Germany.

Racefopulver—Light brown powder packed in waxed capsules. Contains 0.05 gram theophyllin-ethylenediamine, 0.05 gram caffeine, 0.0025 gram agaric acid 0.015 gram synthetic, racemic ephedrin, 0.011 gram extract of belladonna and 0.01 gram dimethylaminopyroazolone. For asthmatic pains. Dr. Nuisbaum & Co. Chemische Fabrik, Wurzburg, Germany.

Salizyl-Kamofer-Percutol—Solution of salicylic acid and camphor in percutol (ethyl salicylate, softened and liquefied by physical process). To obtain increased action of both salicylic acid and of camphor. Treating rheumatism and neuralgia. Chemische Fabrik Reisholz G.m.b.H., Duesseldorf-Reisholz, Germany.

Sivasit-Heyl—Tablets. One gram tablet contains 0.45 gram phenylquinolin-carboxylic acid amide, 0.46 gram acetylsalicylic acid and 0.09 gram calcium carbonate. For grip, acute colds. Dose, one tablet in glass of water three to four times daily after meals. Heyl & Co. Chemische Pharmazeutische Fabrik A.G., Berlin.

Theal—White tablets. Contain desoxycholic acid, papaverin, natural Carlsbad salts effervescent magnesium salts, peppermint oil. For cholelithiasis, interruptions of flow of gall, inflammations of gall bladder and gall passages, ikterus catarrhalis, infectious intestinal diseases; after-treatment in operative cases of cholelithiasis. Desoxychloic acid is a cholelytic and cholagogue, while papaverin unlossens contracted muscles of small and large gall passages and thus enables free flow of the gall. Thermia Chem ch-Pharmazeutische Laboratorium, Budapest, Hungary.

Analgit—Salve in tubes. Slightly yellow color, very soft and partially translucent. Has strong odor of mustard oil, chloroform and amyl acetate. Contains 2.7% salicylic acid, 40% paraffin (solidification point 45° C.), 25% starch, 7.5% chloroform, 0.0% alcohol, 13% water and 0.4% mustard oil.

Orbinal—White crystalline powder in capsules. Contains sodium pyrophosphate. Soporific. Orbis Werke, Braunschweig, Germany.

Ganiwol-N.—White, crystalline powder in glass tubes. Each contains 3.4 grams. Contains 25% anhydrous sodium sulfate, 60% sodium chloride and 15% sodium nitrate. For kidney stones.

Vogan—New vitamin A preparation. Light colored oil, slight smell and taste. Vitamin content 100 times that of cod liver oil. One cc. contains 40,000 vitamin A units. Improves nutrition of body, aids body growth, increases resistance to infection. For catarrhal conditions in children, anaemia, convalescence. General strengthening, prophylactic and medicament in place of cod liver oil. I. G. Farbenindustrie A.G., Frankfurt-am-Main, Germany and Merck & Co., Darmstadt.

Ioterpa—Deep colored liquid in bottles containing 30 and 100 grams. Designated as 6% or 10% iodine-terpene preparation. Externally for phlegmones, inflammations of bones, skin, and tendons. Rubbed into affected parts in pure state or mixed with equal parts of mercury salve. Therapogen A.G., Koeln-Suelz.

Ioterpa Mit Quecksilber—Ioterpa with red oxide of mercury in ratio of 10 to 1. In bottles containing 30 and 100 grams. For inflammation of gall, old thickened conditions of tendons and inflammation of periosteum. Maker, ditto.

Knoblauch Extract-Pastillen Sanhelios—Pure, concentrated garlic extract, prepared from Bulgarian garlic in pastille form. Also sugar-coated brown pills. Prophylactic and tonic in metabolic troubles, particularly in disturbances of mechanism of metabolism, hardening of arteries, rheumatism, gout and sciatica. Dose, two pills or pastilles three times daily. Dr. Schmidt & Co., Berlin.

(*Continued on page 48*)

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T. L. White Beeswax

T. L. PURE WHITE BEESWAX, Extra Quality is prepared from the highest and most costly grade of crude beeswax. It is most carefully selected at its source and again, on arrival at the T. L. Factory, examined piece by piece. Doubtful pieces are rejected. It is 100% pure and higher than U. S. P. standards.

Throughout the process of bleaching, the original characteristics of the high grade crude beeswax are retained, resulting in a product of extraordinary value to the cream manufacturer. The high melting point and character of T. L. PURE WHITE BEESWAX imparts to the product a very high emulsion value. This property enables the cream manufacturer to use less beeswax in the preparation of the cream and with the assurance that the emulsion is permanent.

T. L. WHITE BEESWAX has been the standard of quality for over *eighty years*. Its constant uniformity gives the best results in making cold cream.

Pioneer Brand Pure Refined Yellow Beeswax

Extra Quality, 100% PURE and higher than U. S. P. Standard. Made from the same high grade crude beeswax as the T. L. Brand, excepting that it is not bleached white. Because of its natural light yellow color it is especially adapted for lemon creams and like preparations.

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The Compounders' Corner

Vehicles for Tooth Pastes

Liquids, added to dentifrices to obtain a pasty consistency, are commonly known as vehicles. The most common are glycerin, water, and ethylene glycol. Honey and sugar solutions have been proposed for the same purpose, but they are not as effective as the others and furthermore they have the disadvantage of separating out. Addition of soap and mucilaginous substances to the paste is recommended to thicken the latter and aid it to combine with or hold water more readily. Glycerin is commonly used in C. P. grade, 28° or 30°Be. Both glycerin and ethylene glycol are highly hygroscopic and they prevent drying. Ethylene glycol is much more expensive than glycerin, although it is claimed to possess advantages over the latter. On the other hand glycerin is claimed to have antiseptic properties. The glycerin content must not be less than 20 to 25%. It is stated that ethylene glycol need not be used in such high percentage to obtain the same effect. When the tooth paste contains peroxide or other salts, that split off oxygen, glycerin must not be used, because it prematurely decomposes the peroxide and liberates oxygen, thus reducing the effectiveness of the oxygenated paste. An exception to this rule is potassium chlorate and glycerin may safely be used in such pastes. Anhydrous ethylene glycol has been recommended for use in ordinary peroxide pastes, as it does not appear to decompose peroxides, but indefinite stability of the oxygenated paste cannot be assured. Under certain conditions ordinary alcohol may be employed as vehicle.

Foaming Hair Lotions

To obtain a good lather or foam with such lotions, they must contain at least 60 to 68% of alcohol. Ready compounded foaming or lathering mixtures generally contain saponin and have strong alkaline reaction, making them unsuitable for making hair lotion. On other hand saponin and saponin-like substances can be used in making high alcoholic hair lotions, since alkaline reaction is not manifested in an alcohol medium. It is claimed that lather is produced only in bottle on shaking aqueous products and not on hair itself. Vegetable hair lotions lather more readily than pure alcoholic lotions, for reason that albuminous substances promote lathering. Sodium bicarbonate, ammonium carbonate, borax and ammonia are substances that promote foaming or lathering. Various combinations are usually made from these substances. About 0.5% of a 10% ammonia water is added at maximum and no more than 2% of other substances should be used. Ammonium carbonate is not used when mixture contains ammonia. Good mixture consists of 0.5% of ammonia and 1.5% of borax and sodium bicarbonate. A well-foaming, vegetable hair lotion is made with addition of saponin-containing quillaia bark. Alcohol of about 60% by volume is used, made by mixing 1000 parts of 95% alcohol with 600 parts of water. It is recommended that about 20 parts of sodium bicarbonate be added to water before being mixed with alcohol. A tincture is then prepared from one part of quillaia bark and 10 parts of 60% alcohol and 100 parts of tincture and 900 parts of alkaline alcohol give 1,000 parts of finished hair lotion. This may then be suitably perfumed, preferably with ten parts of mixture, consisting of 790 parts of easily soluble lilac oil, 30 parts of heliotropine, 50 parts of muskinol, 30 parts of hydroxycitronellal, 50 parts of terpineol and 50 parts of jasmol. Soap cannot be added to aid lathering properties of these hair lotions, for reason that a large quantity of water must be used to make preparation lather and then it is not a lathering hair lotion but a shampoo.

Almond Oil in Cosmetics

Almond oil may be expensive oil for making cosmetics but its properties are well suited for compounding skin preparations, creams and other products. It is very thin and has a low solidification point, the true almond oil being liquid even at −10°C. Slight viscosity of almond oil makes it highly useful in skin creams and it is claimed to penetrate the skin most easily into all fatty oils. Furthermore, while it oils the skin, it does not give it an oily appearance. It is excellent for massaging where oil is rubbed into skin. Latter can absorb quite considerable of oil. Certain cosmetic preparations, like skin creams, are best made with almond oil and this in spite of contention that almond oil easily turns rancid. This is claimed to be based on ancient literature, because modern investigations have shown that almond oil is not easily spoiled. Wherever easy adsorption into skin is required, almond oil is said to give best results. Lanolin-almond oil-water emulsions are said to be more highly effective and to leave less of an oily coating on skin than cold cream.

Dull Luster Cream

This cream is made with triethanolamine. Ten parts of glycerin are mixed with one part of triethanolamine and 7 parts of water and heated to 90° C. Into this mixture there is poured thin stream of 22 parts of molten stearic acid with constant agitation. Mixture is agitated until completely cooled. Thereafter cream is perfumed by half to one per cent of mixture, consisting of 30 parts hand-pressed lime oil, 30 parts lemon oil, 15 parts French verbena oil, 20 parts menthol and 5 parts benzoin resinoid. Cream does not make skin glossy.

Non-Greasy Cream

Two parts of agar-agar are softened with 400 parts of cold water and then slowly heated to boiling. This is accomplished on an asbestos plate over a direct flame. Then 60 parts stearin, 8 parts beeswax, and 8 parts lanolin are melted together, and 12 parts alcohol are added and emulsified with addition of small portions of 4 parts potassium carbonate and 2 parts sodium carbonate in 430 parts boiling water; 60 parts of 28° Be. glycerin are also added. Emulsification process takes place in vessel large enough to hold double the quantity of finished cream. As soon as emulsification is complete, the hot agar-agar solution is added, both solutions being kept at 80° C. Mixture is vigorously agitated and allowed to cool. It may be perfumed as desired.

Dry Hair Cleansing Powder

Powder is made from 300 parts boric acid, mixed with 250 parts starch, 200 parts precipitated barium sulfate, 150 parts orris root, 50 parts magnesium carbonate and 50 parts precipitated chalk. This powder is useful only for removing grease and oil from hair. It does not clean like a hair wash.

Stable Salve Base

Such a base is made by mixing 27 parts peanut oil, 27 parts olive oil, 20 parts castor oil, 4 parts almond oil and 5 parts oleic acid with 20 parts ammonia liquor with vigorous agitation. Another base consists of 150 parts soya bean oil, 4 parts oleic acid, 50 parts ammonia. If two parts stearic acid are used in place of oleic acid, a fine white salve base is obtained.

Haematoxylin in Hair Dyes

Haemotoxylin is used with diaminophenols or aminophenols in hair dyes. It is claimed that these preparations are not dangerous to health. Aqueous solutions are clear and colorless. Color produced on hair is fast to light, air and water. Only very small quantities of metaphenylenediamine, orthophenylenediamine, an animophenol or para-aminodiphenylamine need be added to tone shade. Paraphenylenedianine need not be used at all. Blond shades are obtained from mixture of 0.5 part of haematoxylin and 0.3 part of ortho-aminophenol. Deep

Be Critical - -

When you buy **LANOLIN**

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EVERY chemist knows that there are many kinds of Lanolin. Those who have been making creams, salves, ointments and other products using Lanolin know, in addition, that certain Lanolins, apparently of fine quality, badly deteriorate in a few months and entirely spoil the fine quality of the manufactured cosmetic or pharmaceutical.

The technical developments by which the refined Lanolin of today is so superior to the refined Lanolin of only a few years ago rest primarily on new advances in the process of refining.

The B-W process of refining does NOT make use of centrifugals. The process which has been developed for the B-W grade of refined lanolin for drug and cosmetic uses goes far beyond the refining made possible by this older process.

Under this new process B-W Lanolin is practically odorless, colorless and has a fine, firm body. *And*, these qualities not only are uniform and constant, but remain so over a prolonged period beyond any commercial requirements.

Be critical when you buy Lanolin. It costs no more to have the best, but it does mean a lot in having no worries or returned goods or unfavorable criticism from customers who find traces of tar or asphaltum working through the cream.

Many chemists and buyers of leading pharmaceutical and cosmetic manufacturers now insist on B-W Lanolin. This policy has followed a thorough, exhaustive investigation of Lanolin. You will find, too, that it will pay to critically compare B-W Lanolin.

B-W Lanolin U.S.P.

Misleading statements have recently been made inferring that imported Lanolin must be U. S. P. to pass the Custom House or the Appraisers.

This is not true. U. S. P. or technical grades may be imported. There is no guarantee by the Custom House or Appraisers and all Lanolin imported is not tested.

May we send you a sample?

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First American Manufacturer of
Refined Lanolin, Hydrous and Anhydrous
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black without greenish cast is obtained from mixture of 0.5 part of haematoxylin and 0.3 part of para-aminodiphenylamine. Chestnut brown is produced with 0.5 part haematoxylin and 0.5 part para-aminophenol. Fine, dull blond shade is given mixture by of 0.5 part haematoxylin and 0.5 part metaphenylenediamine.

Benzyl Alcohol and Esters in Tooth Pastes

Benzyl alcohol improves cleansing action of tooth pastes. It helps to remove yellow film on enamel as well as tartar without usual application of acid being required. It does not attack enamel in any way. It may be added directly to tooth paste or mixed with bases and diluents. An example of such a paste contains 10 parts benzyl alcohol, 70 parts precipitated chalk and 20 parts glycerin. Esters of benzoic acid may also be used, such as benzyl valeriante, benzyl formate, benzyl acetate and benzyl lactate.

Well-Tasting Tonics

Tonics containing haemoglobin do not taste well. A good taste can be created in such products as follows: 10 parts lecithin are mixed with 20 parts alcohol, 200 parts port wine, 100 parts cognac and 240 parts glycerin and heated to 33° C. until clear solution forms. This solution is mixed with two parts licorice essence (sometimes Benedictine essence). Thereafter 330 parts liquid haemoglobin (33%) are mixed with 340 parts water and the lecithin solution gradually added. Total weight is brought to 1000 parts with water. Another method of making the haemogblobin preparation is to mix 100 parts of the haemoglobin extract with 150 parts water, 30 parts glycerin, 20 parts cognac and 0.3 part Benedictine essence.

Rapid-Congealing Suppositories

The base is a mixture of pure coconut oil and 5 to 7% spermaceti. Molten mass congeals much more rapidly than pure coconut oil. Following mixture may also be used in place of cocoa butter: 3 parts beeswax, 6 parts spermaceti, 36 parts olive oil. Ingredients are mixed by melting.

Mineral Oil Emulsion

Useful emulsion is made from 720 parts mineral oil, 108 parts agar-agar, 108 parts gum arabic, 2 parts benzoic acid, 0.2 part saccharin and water to make 1800 parts in all. Another emulsion contains 500 parts mineral oil, 5.5 parts agar-agar, 120 parts sugar, 30 parts gum arabic, 4 parts gum tragacanth, 6 parts tincture of vanilla, 2.5 parts tincture of lemon peel, 0.3 part cinnamon oil and water to make 1000 parts in all. Four hundred parts mineral oil are mixed with 6 parts gum tragacanth, 5 parts gum arabic, 100 parts sugar and water to give 5,000 parts in all. Two drops of benzaldehyde are added as well.

Antiseptic Mouth Washes

Simplest way to make an antiseptic mouth wash is to dissolve 2% of potash soap and 8% of selected essential oils in 90% of 85% alcohol. Both benzoic acid and sapamin acetate are found in another preparation, which is made by dissolving 50 parts of chemically pure benzoic acid in 1,000 parts of 55% alcohol, as well as 50 parts of essential oils and 5 parts of sapamin acetate. Pure triethanolamine oleate is useful for this purpose, being used in proportion of 10 parts in 1,000 parts of 80% alcohol, along with 100 parts tincture of myrrh and 80 parts essential oils. Latter should be added to mixture after other ingredients have been dissolved in alcohol. Monoethyl ether of diethyleneglycol is claimed to give a good mouth wash in proportion of 1,000 parts as solvent for 50 parts of selected essential oils.

Correcting Mineral Oil Taste

Various essential oils and aromatics may be used to correct or improve the taste of mineral oil. These include lemon oil, menthol, vanillin, saccharin, eucalyptol, and peppermint oil. Following mixture may be used to destroy the oily feeling often produced in mouth by mineral oil preparations. Thus 200 parts mineral oil are compounded with 6 drops ethyl butyrate (pineapple essence), 1 drop ethyl acetate, 2 drops lemon oil, 1 minim saccharin, 0.1 part citric acid and 2 parts almond oil. Mixture is allowed to stand for some time, and then filtered through warm, dry filter. Clear preparation of good taste is obtained. Two drops each of lemon oil and peppermint oil are recommended for 100 grams of mineral oil.

Hair Restoring Bay Rum

Bay rum with hair restoring properties may be made by addition of usual hair restoring ingredients to ordinary bay rum. A suitable bay rum is made by dissolving 1.5 parts of bay oil, 0.3 part of pimento oil and 0.2 part of eugenol in 600 parts of alcohol. Then 0.5 part of ethyl acetate is added. Then 0.5 part of quassia extract is dissolved in 400 parts of water. Hair restoring ingredients may be previously dissolved in water or in the alcohol. Solutions are heated gently if necessary and both cooled and then mixed together, and filtered.

Mascara Preparations

Black mascara preparations are made from 140 parts of a good black, such as lampblack, which is finely ground in 210 parts of simple tincture of benzoin (20% strength). Then there are added 12.5 parts of gum lac dissolved in 630 parts of alcohol, 5 parts of castor oil, and 2.5 parts of rose perfume or like. Ordinary mascara in aqueous mixture can be made from 10 parts of lampblack, ivory black or drop black, mixed with 10 parts of powdered gum acacia and rubbed out thoroughly with 80 parts of rose water or orange flower water. Gum acacia may be replaced by 2 parts gum tragacanth rubbed down with 10 parts perfumed alcohol. Chinese or India ink are also used for this purpose. For example, 10 parts India ink powder are mixed with one part gum acacia and sufficient orange flower water to make 100 parts. Pasty preparations are made from 8 parts suitable black, rubbed out fine with one part hard paraffin and 11 parts soft paraffin previously melted. Solid form of mascara is obtained by wetting out 10 parts of one of fine blacks and mixing it with 90 parts of soap chips. Mixture is made up into small tablets or bars. Brown shades are prepared from burnt sienna and brown umbers.

Vehicle in Skin Creams

Lanolin is most easily absorbed of all fatty substances. Beeswax and tallows with exception of mutton suet are also well absorbed. Lard, olive oil and almond oil are also suitable. Stearin alone of the fatty acids is usable. Cocoa butter is excellent for purpose but it is not as easily absorbed as lanolin. Cocoa butter penetrates less deeply into skin but it has very mild, softening effect. Cocoanut oil must not be used. In first place it is rarely neutral in reaction and is particularly dangerous to skin in rancid state. Many people are susceptible to irritation from even purest oil. Petrolatum and white oil are not well absorbed but they are useful for softening skin. Petrolatum in admixture with lanolin is readily absorbed. Any fatty substances, even though it may be very well suited for making skin cream, should be rejected if it has tendency to become rancid. It can only be used when well preserved. Esters of parahydroxybenzoic acid are claimed to be among best preservatives for this use. Bleached beeswax can be used only in thoroughly purified state in presence of benzoic acid, it is stated. Castor oil is useful and may be considered as free from rancidity. Vehicle in skin creams is usually not a single substance but a mixture. Thus only 15 to 20% lanolin is sufficient to bring about marked increase in absorptive powers of mixture. Only 10% of lanolin need be used with cocoa butter to attain very high absorptive power. Equal parts of petrolatum and lanolin give vehicle which is rapidly absorbed by skin and which is itself able to absorb large quantities of water. Presence of water in skin cream promotes absorption. This is also true with stearates. Stearin has been claimed by some to have an irritating action on the skin. However, on closer examination it has been found that this is true only when the stearin has not been properly prepared. When traces of reagents used in manufacture of pure stearin are removed, product is excellent for skin creams.

C U C U M B E R

Creams delicately scented with the real Cucumber odor find an established market.

We offer a few suggestions which will prove helpful in developing a compound of this type. The same products supply a rich green background for those fine perfumes where "atmosphere" is required.

Methyl Ionone
Anisic Aldehyde
Amyl Heptine Carbonate
Bergamot
Methyl Heptine Carbonate

If you prefer a finished compound artistically blended, we would suggest one of the following established products, both of which already enjoy an enviable reputation:

Cucumber Odor B.
Cucumber Odor P. 585.

COMPAGNIE PARENTO, Inc.

EXECUTIVE OFFICES AND LABORATORIES
CROTON-ON-HUDSON, N. Y.

NEW YORK
507 FIFTH AVENUE

TORONTO, ONT.
73 ADELAIDE ST., W.

Cooling Creams

Cooling creams or salves are used as propholactics in cosmetics. They prevent irritation of skin, as in case of depilatories. They are made with various chemical or botanical ingredients or by action of ultra-violet light. Simplest form of cooling salve contains water, distributed in mixture of fats or fatty waxes. Cold cream is a cooling salve. Water in cold cream is held very loosely and hence is easily separated. It cools skin by evaporation. When fat or wax holds water more closely, cooling action of salve is less marked. This is true of lanolin salves. Lanolin must, therefore, not be considered of equal cooling potency as cold cream. Lanolin salves must contain considerable proportions of water in order to have satisfactory cooling action. Thus suitable lanolin salve of this type is made by mixing 10 parts lanolin with 10 parts almond oil and 30 parts water. Salve thus contains 60% water, while spermaceti oil-wax cold cream contains only 15 to 25% water. Cooling action is increased when powder is incorporated with cold cream. Thus, one part rice flour is mixed with two parts cold cream, or one part magnesium carbonate with four parts cold cream. Petrolatum is used in cooling creams, composition containing one part magnesium carbonate, two parts water and two parts petrolatum. Magnesium carbonate is first mixed with water and then petrolatum is added. Addition of chemicals increases cooling action of cream. Thus product is obtained, highly recommended for treating sunburn, by substituting 10 parts aluminum acetate for 10 parts water in lanolin-almond oil cream described above. Menthol also has cooling action by direct influence on nerve centers. One part menthol is dissolved in lanolin-almond oil mixture to give reputed highly effective product.

Permanent Wave Preparations

Permanent wave preparations for ordinary hair may be made with ammonia, but in case of dyed hair ammonia must not be used. Thus a preparation containing ammonia in combined form can be made by dissolving 4 parts ammonium chloride and 8 parts potassium carbonate in 1,100 parts of water and then making solution of 16 parts each of jasmine extract, white rose extract and glycerin in 60 parts of alcohol. Two solutions are then mixed together. Preparation recommended for henna dyed hair or hair weakened by bleaching, excessive waving and like is made by dissolving 40 parts potassium carbonate, 10 parts borax and 100 parts gum tragacanth mucilage in rose water. Solution of 5 parts coumarin, one part methylacetophenone is made in 100 parts alcohol. Solutions are mixed together and rose water added to make total of 1,000 parts.

Cod Liver Oil Emulsion

A good emulsion is obtained by triturating 15 parts gum arabic with 40 parts crude cod liver oil and then adding 5 parts water to form emulsion. Then 50 parts slightly-warmed honey are gradually added while mass is agitated. Finally 2.5 parts gum tragacanth and 12.5 parts pulverized gum arabic may be used in place of gum arabic alone. It is possible to mix honey with cod liver oil without use of emulsifiers. All proportions may be used. Emulsion is made by vigorously shaking the two ingredients and then allowing it to stand for few days, when it is shaken again. In another method 120 parts gum tragacanth are triturated with 100 parts alcohol and 100 parts glycerin. At same time a mixture of 200 parts gum arabic and 100 parts alcohol and like proportion of glycerin is similarly prepared. Then 100 parts water are added to each preparation, and each mixture is heated separately on steam bath until gums have been thoroughly hydrated or swelled. Then the two liquors are combined and pressed through muslin and made up to 1,000 parts with water. Mixture is then ready for use in cod liver oil emulsions, in proportion of 20 parts to 80 parts cod liver oil. In making these emulsions the character of cod liver oil used is highly important. Pure oil does not give as good an emulsion as crude product, for reason that latter contains certain impurities which in their small proportion are able to protect and maintain the emulsified state of mixture, without interfering or injuring its medicinal properties.

Glycerin Monoformate in Dentifrices

Dentifrice consists of glyceryl monoformate, essential oils and a binder. Thus 5% of essential oils (principally peppermint oil) is dissolved in alcohol and mixed with about 60% glycerin monoformate and 35% binder. Particular advantage of glycerin monoformate is that it removes not only film from teeth, but also oxidation products contaminating and staining teeth, arising from action of the saliva on solder used in fastening gold fillings and crowns to teeth.

Enzymes in Skin Powders

Skin powders are made containing amyloclastic and proteoclastic enzymes, such as pepsin, pancreas and urase. The powder base used in these preparations may be starch, talc, ground vegetable fibers, zinc oxide, bismuth compounds, magnesia, precipitated chalk or like. One or more dry water-soluble substances are added to activate enzymes in presence of water. These substances include boric acid, sodium chloride, sodium benzoate, albumen, sodium salicylate, potassium borate, sodium pyroborate or hexamethylene tetramine-anhydromethylene citrate. In baby powders, enzymes are incorporated of type stimulated by addition of compounds which have an alkaline reaction in aqueous solution, for example sodium salicylate and potassium borate.

Discoloration of Lead Ointment

Yellowish discoloration of lead ointment is claimed to be due to formation of lead oxide. Addition of highly concentrated glycerin in preparation of salve prevents yellowing of same. Experiments were carried out on lead salves to determine conditions under which yellowing takes place. These salves are made with lead acetate and unguentum molle, or lanolin or petrolatum. They were observed over period of time and found to darken, becoming dark yellow. Lead salts made with paraffin base do not behave in this manner. It was also observed that discoloration of salve took place not merely on surface of mass and at walls of containers but throughout entire mass. Investigation showed that this was not due to impurities, such as iron, sulfur and the like, derived from apparatus in which operations were carried out, because particular care was taken to see that they were scrupulously cleaned before being used. Neither was cause of discoloration impurities, such as sulfuretted hydrogen gas, from air, as operations were carried out in room where air was absolutely clean. Careful study revealed that trouble lay with salve base, that is, impurities that are contained therein. This refers particularly to impurities, that have reducing action on lead in these salves. Thus sulfur dioxide may well be present in salve bases, such as lanolin, petrolatum and the like, which are bleached with sulfur dioxide. Even very small traces are sufficient to cause discoloration of lead salves for reason that lead acetate is very sensitive chemical.

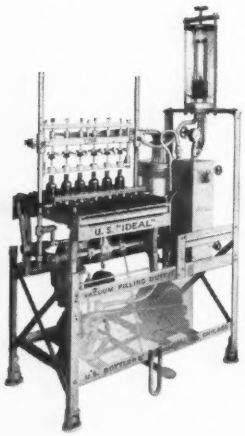
Salve bases, which have tendency to discolor, are treated in hot with hydrogen peroxide. Latter reacts with traces of sulfur dioxide and is reduced to water while sulfur dioxide is oxidized to higher state of oxidation and generally converted into sulfate, which is harmless. This reaction is similar to one carried out in removing traces of sulfur dioxide remaining in fruits, such as white cherries, after bleaching with sulfur fumes. Salve base is washed well to remove sulfate. Test made with such salve base, dissolved in petroleum ether or pentane, which is free from sulfur compounds, and then dried over sodium sulfate and thereafter worked up into salve proved conclusively that presence of trace of sodium sulfate in salve had no bad effect whatsoever. Discoloration did not take place after salve had been kept for long time.

PACKAGING DRUGS AND COSMETICS

A SECTION OF "THE DRUG AND COSMETIC INDUSTRY"

SCHAEDLE

EFFICIENT AND ECONOMICAL SOLUTIONS OF YOUR PACKAGING PROBLEMS



U. S. "PEERLESS" VACUUM FILLER MODEL "A"

Easily adjusted to a wide range of containers. Quickly adapted to either CT and Cork Finish or AGST ware.

U. S. REVOLVING CONVEYOR TABLE

The ideal unit for flexible accumulation between operations.

10 *ways in which* U. S. EQUIPMENT *saves you money*

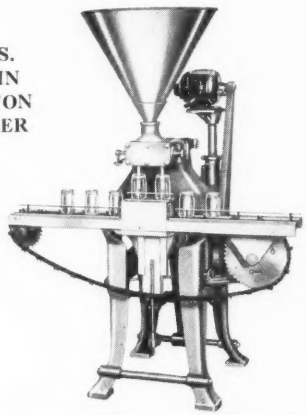
1. Cuts down number of employes to produce same output.
2. Increases output with same number of employes.
3. Saves loss of materials through wastage or spoilage in delay.
4. Saves costly floor space now wasted.
5. Reduces fire and accident hazards, and insurance costs and penalties.
6. Attracts better workers through improved conditions.
7. Increases sales results by improving your product in quality and appearance.
8. Makes your operation more secure by transferring responsibility for consistent quality and quantity production from human to dependable mechanical hands.
9. Insures low cost production because of sturdy, lasting construction.
10. Give your executives more time for essential problems.

Let us tell you what our Engineering Department can do for you. No cost or obligation whatsoever. Write at once for details.

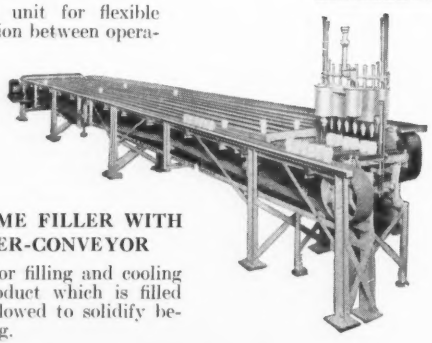
U. S. ROTARY WASHER, RINSER & STERILIZER

Handles a large variety of containers, with capacity of 60 to 120 per minute. All water contact parts before reaching the container are of bronze or brass construction, insuring life-time operation.

U. S. TWIN PISTON FILLER



Fully automatic machine for filling heavy viscous products.



U. S. ACME FILLER WITH COOLER-CONVEYOR

Designed for filling and cooling of any product which is filled hot and allowed to solidify before capping.

U. S. BELT CONVEYOR TABLE

Organizes production and keeps it moving smoothly. Can be furnished in various lengths.

U. S. BOTTLERS MACHINERY CO. INC.

INVESTIGATE U. S. EQUIPMENT

Agitators
Belt Conveyors
Cappers
Corkers
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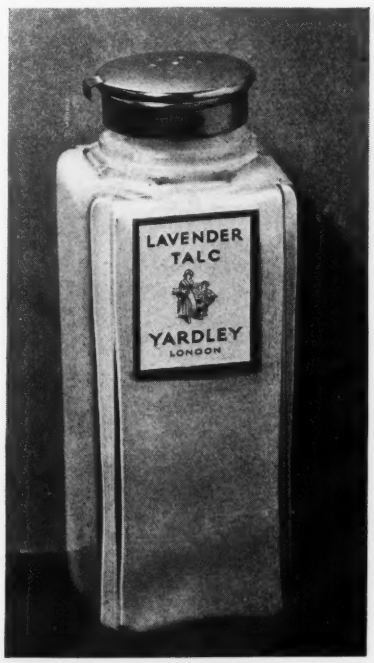
Strainers
Washers
Dryers
Vacuum Fillers
Accurate Measure Fillers
Piston Fillers
Cooling Conveyors
Storage Tanks

4015-31 No. Rockwell St. · · · · Chicago. Ill.

One of the newer developments in the collapsible tube field is the tube with the screw eye closure shown above. It is made with a blind orifice with a thin diaphragm which is pierced by screwing the screw eye into the orifice of the tube. After the seal is broken in this way, the screw eye can be used for resealing. This type of closure is particularly suitable for materials like glues and cements which tend to "freeze" the more ordinary closure so that it cannot be removed.

Ivory Shaving Cream, a new product of Proctor & Gamble, is now being marketed through the regular drug channels. It is of the lather type and carries with it the well-known slogan, "99 44/100% pure."

A tall, slim, transparent, glass bottle with gold metal sifter top has been chosen by Yardley for its new talc container. The powder comes in the four odors, Bond Street, Orchis, Jessamine and Lavender. The label with its characteristic lavender girl is typically Yardley.



One of the newly designed containers of Nelson Baker & Company's "Garden Court" cosmetic line contrasted with the old style package in which the product formerly appeared. Courtesy Owens-Illinois Glass Co.

THE MARK
OF QUALITY
WORLDS · LARGEST

Beauty in every line

They're pure white. They're round. They're straight-sided. The closures are shiny black. No wonder women are attracted to these Hazel Opal Glass Jars! No wonder they make profits for you!

Any color of label harmonizes—the effect is smart and modern. You can get Hazel Opal Glass Jars in capacities of one quarter ounce to sixteen ounces inclusive.

HAZEL-ATLAS GLASS CO.

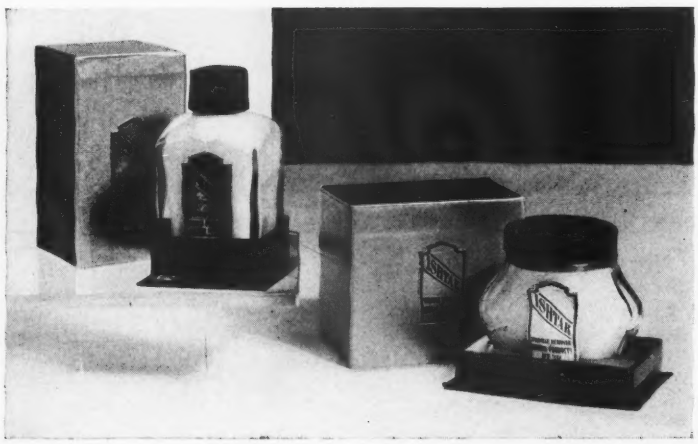
WHEELING, W. VA.

OPAL WARE · MANUFACTURERS

Harriet Hubbard Ayer, Inc., brings out two new preparations in time for mid-summer promotions. "Wave Set" a perfected lotion for setting waves and curls at home is of unusually fine consistency so that it dries quickly and leaves no flaky residue on the hair. The brass stopper screws tightly and prevents spilling even while traveling and is lined with real tin to prevent corrosion. "Wave Set" retails at 55c and $1.10. "Beautifying Bath Powder," in ivory and gold glazed paper that is washable, is of superfine texture and scented with four flower fragrances and a bouquet. It retails at $1.10.

"Sy-Lac" is 97.6% chemically pure *sodium perborate* made pleasant to taste and used as a tooth and mouth cleansing preparation. It is detailed to the medical and dental professions by the staff of Petrolargar Laboratories, Inc.

A recent addition to the attractive Mary Chess line is "Nonoseglo," a liquid designed to prevent shine or grease on the nose, especially efficacious for hot weather. Decalcomania labels are used both for identification and for the directions.



Ishtar lotion and cream, each containing 75 per cent turtle oil, are offered as preventatives of wrinkles and restoratives of youthful vitality to the face. The products, by Ishtar Products, New York, are packaged in attractive bottles and jars topped with black metal caps and decorated with gold and black labels. A gold paper covered box with black base completes the package.

Actual Size
One Dram Bottle
No. 343

Stopper No. "GM" Stopper No. 500 Stopper No. 1104

JEWEL-LIKE BRILLIANCE

New, gem-like bottles of unusual beauty. Cut-glass effect. Upper illustration shows dispensing type bottle, with large neck for easy filling. Molded caps, or glass stoppers in clear, frosted, black, or a variety of colors.

Lower illustration shows our latest style bottle for a standard packaged line. Variety of glass stoppers.

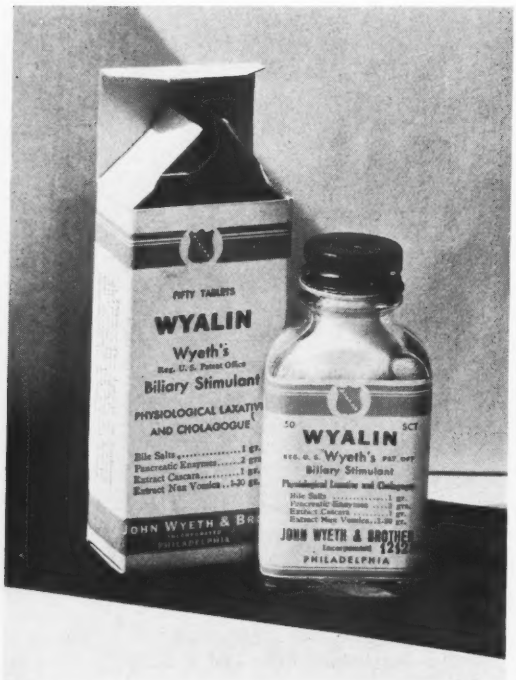
CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE, MD.

NEW YORK OFFICE: 500 FIFTH AVE., Room 1427
Telephone: CHickering 4-0592

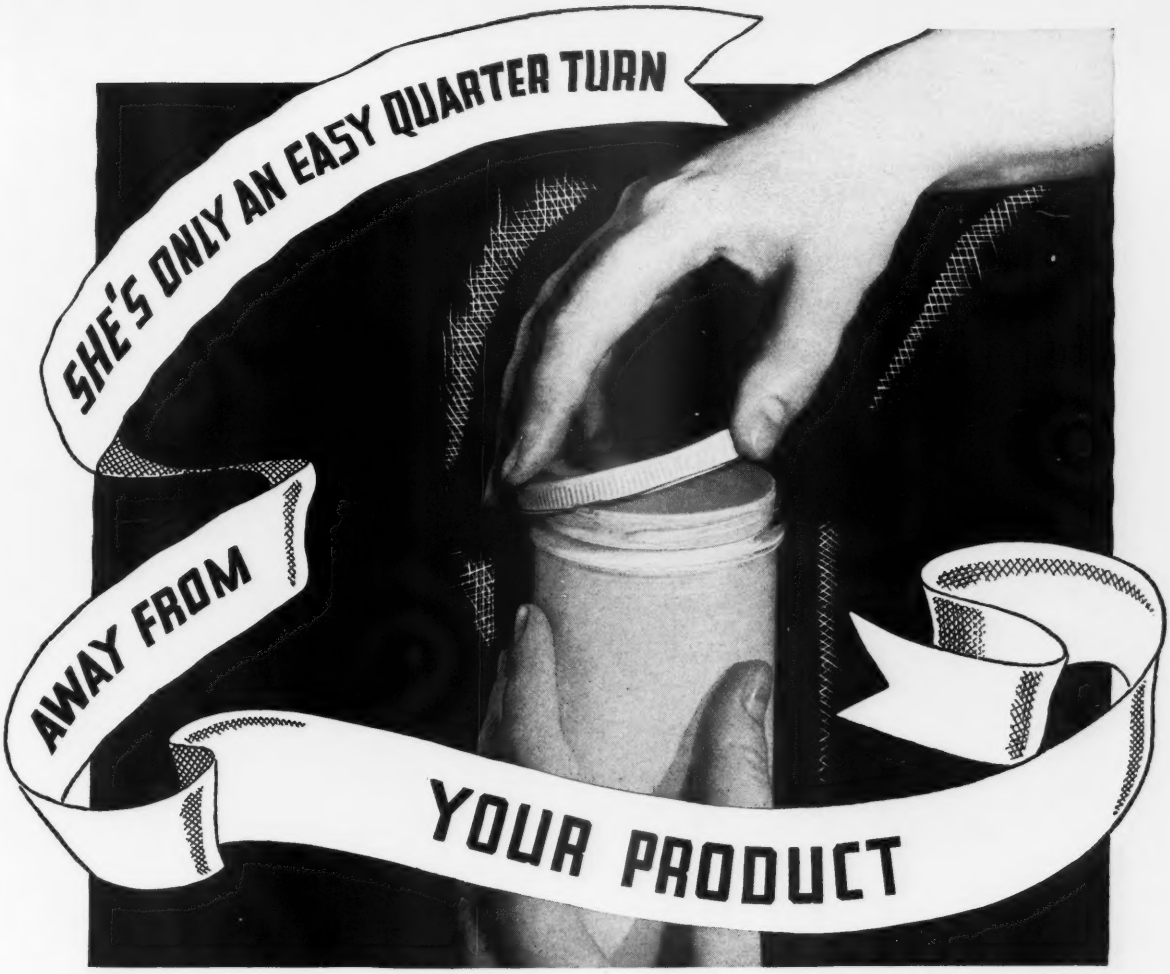
CHICAGO OFFICE: 1502 MERCHANDISE MART
Telephone: WHitehall 4326

Dr. D. Jayne & Son has completely redesigned the packages for its line of household remedies. The new cartons are smart and modern and easily identifiable through the large red "J" on each one. The old type packages are shown alongside of those which are replacing them.



John Wyeth & Bro. is introducing its new biliary stimulant under the name, "Wyalin." It is indicated in the treatment of bilious constipation and as a tonic laxative to stimulate the flow of bile and increase peristalsis.

"**Platinol**" is the newest product of the Golden Co. and is said to be an excellent tint for gray hair and at the same time a good hair dressing. The user applies "Platinol" every day until the desired shade is obtained and then once or twice a week. It is unaffected by shampooing or bathing and recommended as a hair tonic. It is packaged in a blue bottle with golden metal labels.



ANCHOR AMERSEALS bring your product closer to the consumer. She is but a quarter-turn away...and she is fully aware of it! • Users everywhere recognize and appreciate the extra convenience of Anchor Amerseals. They know that free use or enjoyment of the product is right at their fingertips; that struggles with wedged-in corks or delays with "frozen" caps are unnecessary and inexcusable. • No strength tests or twisting statistics are needed to prove that Anchor Amerseals are easy to remove and just as easy to replace . . . far easier than any screw-type cap . . . no matter how many times the container is opened and reclosed. • But best of all, the user finds inside the jar or bottle everything the manufacturer put there—all the original aroma, strength, purity, medicinal or curative properties are intact. Volatile elements are held in, moisture and destructive elements kept out. Proper consistency is assured.

ANCHOR AMERSEAL

★ Let us explain to you in detail how Anchor Amerseals effect their seal; why they are not only helpful to sales but adapt themselves to efficient, speedy production. A request will bring full information.

ANCHOR CAP & CLOSURE CORPORATION
Long Island City, N. Y.—Toronto, Canada • Branches in all Principal Cities

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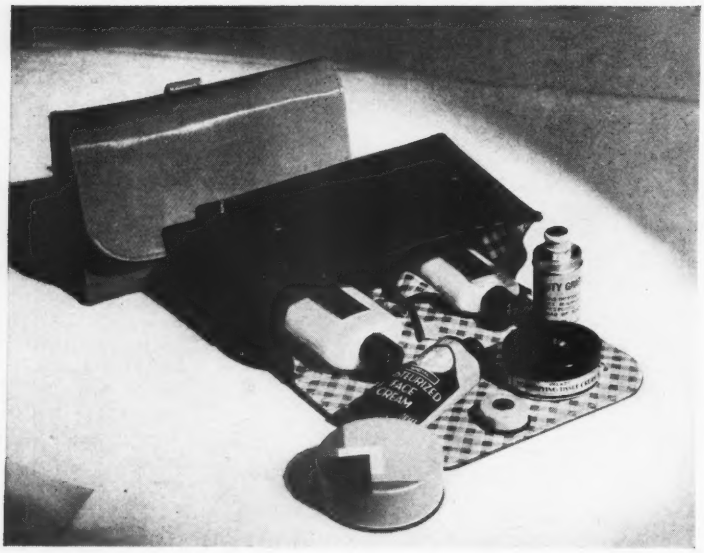

A smart, new "Pick-Me-Up Beauty Kit" by Helena Rubinstein, contains nine of the essential Rubinstein products: pasteurized face cream, skin clearing cream, skin toning lotion, beauty grains, etc., hand lotion, peachbloom powder, miniature lipstick in red coral shade, red coral rouge en creme and eyelash grower and darkener. The kit is very compact in size and is lined with an attractive red and white checked waterproof material.

The packages of Charles Pfizer & Co. for the prescription pharmacist are attractive and easy to use. Flint glass bottles are used throughout, with professional, ethical-appearing labels, and molded screw caps. Courtesy Durez.

The new, delicately scented, make-up foundation cream by Dorothy Gray is lighter and fluffier than the astringent it has replaced. It permits of cream rouge spreading easily; gives a velvety appearance and holds the powder for several hours. It is packaged in the white jar with blue and white label typical of the line.

Arctic Bear Laboratories is introducing a new shaving cream of both the brushless and lather types. These will be introduced through drug channels in combination with the Arctic Bear Razor Blades. A tube of cream, with a package of five blades will be retailed at an introductory price of 29 cents.

WE HAVE
WHAT YOU'RE
LOOKING FOR IN

LIPSTICKS

1. *Smooth Application.*
2. *Non-greasy.*
3. *Truly Indelible.*
4. *Uniform Color.*

Over 17 years of experience in the manufacture of private brand cosmetics guarantees you Lipsticks which are as you want them. We can also furnish you with Bulk Powders, Paste Rouge, Non-Smarting Mascara, Eyebrow Pencils, and Eye Shadow, all shades. In bulk or assembled in your own containers at a considerable saving. For a pleasant surprise, get our samples and prices.

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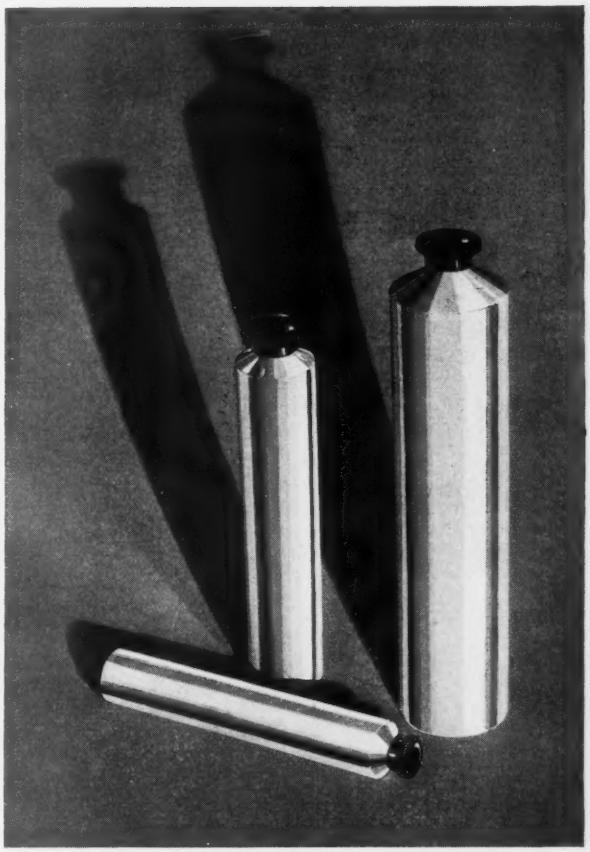
CHARACTER . . . IN TUBES



WE offer you complete service in the creating and designing of decorated collapsible tubes.

We will also gladly assist you in determining upon the best sizes and styles of tubes for merchandising your product—the most appropriate closure or cap—and any other factors involved in the use of tubes as containers.

NATIONAL COLLAPSIBLE TUBE COMPANY
Providence - - Rhode Island
New York Office—341 Madison Avenue
Telephone MUrray Hill 2-1626

The package for Dr. Hubbard's Vegetable Germicide has been completely redesigned, using a squatter, jug-shaped bottle, a new type atomizer, and a molded cap. The Nurse trade-mark is baked directly on the bottle in enamel colors. Courtesy Durez.

Paule liquid beautifier, a liquid powder, by Paule Products, Chicago, is obtainable in five shades, Parisienne-pearly white; rachelle blond—a flesh shade; rachelle brunette, orientale—a golden glamorous tint; and bronze—an exotic tawny shade. Other products of the line are cleansing and beauty creams. Silver all-around-band labels with blue stamping form the decoration on both jars and bottles.

A unique black-and-gold color scheme lends distinction to these packages of the Desco Laboratories. The black glass bottle and cream jar are sealed with metal caps in brushed brass finish. Courtesy Armstrong Cork & Insulation Co.

"Tanabano" is the latest creation of Prince Matchabelli. It is a sun oil scented with the "Abano" odeur. The package is a blue flask-shaped bottle with a yellow label, symbolizing the sun and sea, with the same color scheme carried out in the outside box.

Challenge Attention!
Preference is definitely expressed by Mr. and Mrs. Public when selecting articles packaged so attractively that they invariably *stand out* from the others.
One of America's leading Package Designers . . . HATCH of Lowell . . . has established a reputation for originating many of the most *successful* containers familiar to millions. Write to HATCH for ideas!
The C. F. HATCH Company, Lowell, Mass.

The mark of excellence

RESINOX

•

Articles molded with Resinox are distinguished by all those characteristics which go to make up fine quality: uniform color—freedom from blemishes—enduring strength. For molding material of the finest quality

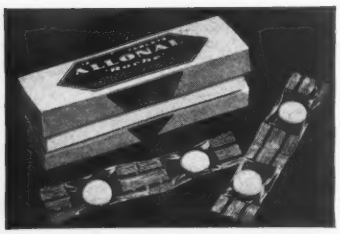
Specify Resinox

MOLDING RESINS • MOLDING COMPOUNDS • LAMINATING VARNISHES

•

RESINOX CORPORATION
A Subsidiary of Commercial Solvents Corporation and Corn Products Refining Co.
230 PARK AVENUE NEW YORK CITY

Superior Brands, Inc., has added a new suntan cream to its line. "U-TAN," as the product is called, although recommended specifically as a sunburn preventive and for general skin care under all conditions of outdoor exposure is also said to be excellent as a skin food and massage cream. It is packaged in an attractively lithographed tube with carton to match and retails at 25 cents.



"Allonal," manufactured by Hoffmann-La Roche, Inc., has just been offered in this new package, which has the dual advantage of being both attractive and imitation proof. The tablet, itself, has also been newly styled, being larger, but not as thick as the former tablet.

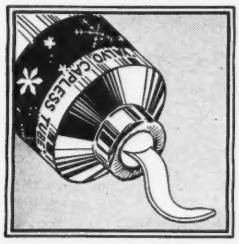
This smart-looking package, attractively designed and executed in three harmonizing colors is offered by The Wm. S. Merrell Co., *Cincinnati, for a new medical specialty,* "Karicin," recently announced to the medical profession. "Karicin" is a palatable, sugar-free emulsion of mineral oil of high viscosity, fine colloidal kaolin, and a specially prepared ricinoleate which regenerates "Soricin" in the intestines.

Brosis is featuring its "Velveskin" face powder and "Turtlene Facial," both packaged in the characteristic silver and white package. The opal jar is also distinguished by the decalcomania label.

PACK-URGES*

by "Duff" Gordon

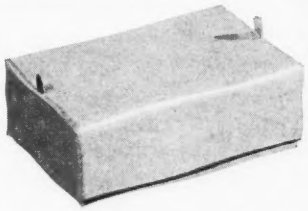
"CAPLESS TUBE" PROVEN SUCCESS AFTER A YEAR'S TRIAL!



Just a little over a year ago Pack-Urges featured a "Capless" tube, suggesting it as the ideal container for tooth pastes, creams, and pastes—by virtue of its eliminating for all time the "lost" tube cap problem—or the costly item of leakage on shipments for foreign climes. Much publicity resulted—and a tooth paste that adopted the new closure reported "success" from the outset.—Now—more than a year later—we have tubes which were filled and numbered for later tests—others in use for twelve months—and these samples prove beyond question that the "Capless" tube overcomes many bothersome questions; is economical to manufacture, as it eliminates cap costs; lives up to its guarantee of automatic closure after each time it is used; and gives manufacturers of tooth paste, shaving cream or what have you, an additional advertisable feature for their products. We are predicting a continued success for the "Capless" tube and will send you samples to prove our point. Write us now for costs and proofs of our statements as to its success.

• • •

MAILERS FOR EVERY PURPOSE



The mailing box illustrated here is just one style of the wide range of "Gordon" Mailers, suitable for every type of *sampling* campaign . . . Some are corrugated lined—others have sealed flaps—all are approved by the *United States Postal* Service . . . Show us what you want to mail and we'll build a box around it that will deliver your product in perfect condition . . . Prices are moderate . . . Workmanship unexcelled . . . A call will bring you full particulars.

• • •

PERFUME AND POWDER BOXES

Every perfumer knows that boxes for Perfumes, Cosmetics and Toilet Preparations should have a note of individuality *built into the box.* Style trends and interior decorative preferences are but two of the many phases which we keep in *mind when making boxes for the cosmetic* trade . . . The only set-up box included in the best All American Twelve Packages was handled in detail by us (designed by Mrs. Avery Robinson)—just another example of our ability to interpret your ideas in definite salable boxes. Call us in on your next box purchase . . . We'll serve you right—and save you money.

"Pack-Urges" is issued occasionally in the interests of better packages. If you wish to receive it regularly it will be sent free upon request. Address: ***H. R. M. Gordon*** *—A Complete Packaging Service—****341 Madison Ave.*** *(Phone Murray Hill 2-1626) New York.*

*Copyright and trade-mark applied for

Coloring Face Powders

FORMULAS

RACHEL *No. 1. 2 to 4 ounces of Cosmetic Ochre R per 100 lbs. of white powder.*

RACHEL *No. 2. 6 to 8 ounces of Cosmetic Ochre R per 100 lbs. of white powder.*

NATURELLE *2 to 4 ounces of Cosmetic Ochre R with ½ ounce of Cosmetic Pink B per 100 lbs.*

PEACH *6 to 8 ounces of Cosmetic Ochre R with 1 ounce of Cosmetic Pink B per 100 lbs.*

Cosmetic Ochre R is a harmless mineral color, five to six times the strength of natural ochres. Infinitely fine in texture, grit-free, excellent in face powder.

PRICES

Cosmetic Ochre R

Bbls. (225 lbs.)	*13c*	*per lb.*
100 lbs.	*18c*	" "
50 lbs.	*20c*	" "
25 lbs.	*25c*	" "
10 lbs.	*80c*	" "
1 lb. trials	*$1.00*	" "

Cosmetic Pink B

Single pounds	*$3.50*	*per lb.*
10 lbs. minimum	*3.00*	" "

f. o. b. New York City.

We likewise have all other colors necessary for other shades. Let us have your problem.

Also Other Face Powder Materials

Super Talc RFR
Colloidal Clay No. 30
Pure Titanium Dioxide
Zinc Oxide (Vieille Montagne) U. S. P. and *Gold Seal*
Kaolin No. 14 (the whitest known)
Magnesium Carbonate U. S. P.
Precipitated Chalk U. S. P.
Magnesium and Zinc Stearates (extra fine grinding)

Write for complete list of raw materials.

R. F. REVSON CO.

110 W. 40 Street **New York**

Specializing in

Chemicals for the Cosmetic Industry

Testing Sunburn Products

By L. Stambovsky

MANY methods have been advanced for determination of the ultra-violet absorption value of various sunburn preventives. Spectograms are expensive and demand a great deal of experience and technique. Chemical methods such as the decomposition of oxalic aicd, the darkening of photographic plates, etc. are less expensive but have little value so far as to how the skin will react under protection of the product being observed.

The method under discussion is based on an erythemal reaction of human skin under the influence of a mercury arc lamp. We have here a direct reading exactly how the skin will be affected and how much protection has been afforded. It is obvious that other methods which give mathematical and comparative results are not as practical as one based on human skin reactions.

The technique is as follows: The anterior portion of the forearm being very sensitive and convienent is selected as the field of exposure. Starting about one inch from the elbow, sections about one inch wide are laid off concentrically and partitioned by strips of adhesive tape 1/8 inch wide which are wrapped around the forearm at each point of division. This gives a sharp line of demarcation. The first segment is used as a control. The next and following segments as test areas. Apply the preparation under observation in these segments in a film comparable to the manner it would be used in actual practice.

Expose to a 350 watt Hanovia mercury arc lamp which has not been used more than 500 hours. Measure the distance from the burner to the target until there is a gap of exactly 15 inches. Verify that the area is level and equally radiated. Before commencing the radiation, the lamp should have been burning at least 10 minutes in order that its maximum output shall have been attained. Expose for 20 minutes.

Evaluation of results are quickly and simply made. The control will of course show a severe burn. The other test areas will show differing erythemas or burns in accord with their ultra-violet absorption value. From Luckiesh the minimum perceptible erythema of a 350 Watt Quartz Lamp at 15 inches is two minutes. Five minutes yields a vivid erythema, 10 minutes a painful burn, and 20 minutes a blistering burn. The M. P. E. of June sunlight is 20 minutes. Therefore two minutes of the lamp is equal to 20 minutes of June sun on an erythemal basis. By reduction therefore one minute of the lamp is equivalent to ten minutes of June sun.

The following table will aid to understand our point.

M. P. E. June Sunlight	20 mins.	1
Vivid Erythema	50 mins.	2½
Painful Burn	100 mins.	5
Blistering Burn	200 mins.	10

Twenty minutes of lamp radiation equals 200 minutes of June sunlight which constitutes a blistering burn in either case. Any product, therefore, to have sufficient merit to warrant its acceptance by the public should absorb sufficient ultra-violet light in order that the skin will not show much more than a vivid erythema, since any dosage in excess of this results in burns.

It has been our experience along the Jersey coast that the average bather is exposed about four hours or 240 minutes. Assuming that product A shows a transmission of about 20% as compared with the control, this would be a safe factor since 20% of 240 would result in 48 minutes radiation calculated as 100%. But conditions under the mercury arc lamp are not as gruelling as a hot June day for the following reasons: The solar spectrum contains enormous quantities of infra-red which exert a synergistic effect towards ultra-violet; dilation of the skin and hyperemia induced by heat and infra-red make the skin still more sensitive; absorption by the skin of most organic substances, and finally, reduction in viscosity of liquid preparations by heat reduces the thickness of the protecting film. For these reasons we have found it accurate to add 25% more to our transmission factor obtained under the lamp. Therefore, product A with a transmission of 20% plus 25% for reasons mentioned above yields a total transmission of 45%. Two hundred and forty minutes, 45% of which yields 108 minutes, to be calculated as 100% effective radiation and from the foregoing data it can readily be appreciated that this exposure with this protection would result in more than a painful burn.

It is therefore necessary that the product be reinforced to transmit still less ultra-violet.

Tooth Powders

(*Continued from page 19*)

NO. 2

Calcium carbonate	500 grams
Tricalcium phosphate	150 "
Calcium chloride	20 "
Bicarbonate of soda	50 "
Pulv. neut. soap	55 "
Confectioner's XXX sugar	100 "
Flavor to suit	8 "

Non-Alkaline

Creams

Manufacturers interested in non-alkaline creams will find it to their interest to investigate the properties of PROTEGIN X, an odorless absorption base for neutral or acid water-in-oil creams, and TEGIN, a ready base for neutral oil-in-water creams.

Brushless Shaves

A non-irritating and non-greasy brushless shaving cream can now be easily made by using our new EMULSIFIER 157. It also serves as an excellent base for pearly-lustered, non-greasy vanishing creams and for stable oil-in-water type liquid emulsions.

PRESERVATIVES

and

ANTISEPTICS

NIPAGIN M, NIPASOL M, and NIPABENZYL. Phenyl coefficients: 3, 17, and 109. Neutral, odorless and non-irritating.

Recommended for their high efficiency in agar emulsions, gum solutions, eye washes, hair waving preparations, vaginal douches, vegetable oil emulsions, skin creams, and in any products which require an antiseptic or preservative.

Th. Goldschmidt Corp.

70 Pine Street New York

HAVE • YOU • A • PROBLEM

of

- MIXING
- EMULSIFYING
- FILTERING
- FILLING
- CAPPING
- LABELING
- CARTONING
- WRAPPING

bring it to

FRANCIS CHILSON

PRODUCTION AND PACKAGING ENGINEER

101 • WEST • THIRTY • FIRST • STREET • NEW • YORK

WE • WILL • SOLVE • IT

"FILMA-SEAL"

(the double seal of cap and film)

TAMPER PROOF, it keeps that inquisitive finger from testing or sampling

FACIAL CREAMS
COSMETICS
POWDERS

"FILMA-SEAL" is so tightly adhered to top of the container, that **FILM** must be removed before product can be touched.

LEAK PROOF, it Prevents Evaporation.

Used by many nationally known advertisers who are satisfied with this inexpensive safety their products thus enjoy.

We insert **"FILMA-SEALS"** in our continuous thread Caps and in your Molded Caps.

"FILMA-SEALS" are low in price. Automatically transferred to bottles and jars when cap is applied. 20 to 105 per minute depending upon filling and capping systems employed.

NO additional labor costs.

FERDINAND GUTMANN & CO.

Established Since 1890

Bush Bldg. No. 19 39th St. & 2nd Ave.

Brooklyn, New York

Trade Marks Reg. Pats. Pending

Procedure: Mix the flavoring with the sugar thoroughly. Add the soap and mix again. Add the bicarbonate and the calcium chloride. Mix. Add the tricalcium and the chalk and mix thoroughly and sift.

NO. 4

Magnesium carbonate	425 grams
Precipitated chalk	560 "
Sodium perborate	55 "
Sodium bicarbonate	45 "
Soap	50 "
Sugar	90 "
Methyl salicylate	8 cc.
Menthol	1 gram
Oil of cinnamon	2 cc.

Procedure: Dissolve the menthol in the methyl, add the cinnamon and then add to and mix with sugar. Add soap, perborate and mix thoroughly. Add the chalk and mix and finally add the bicarbonate and the magnesium carbonate. Mix thoroughly and sift.

NO. 5

Precipitated chalk	500 grams
Tin oxide	95 "
Tricalcium phosphate	100 "
Soap	30 "
Sugar	50 "
Flavor to suit	8 "

Procedure: Incorporate flavors with sugar, add soap and mix thoroughly. Add tricalcium and chalk, mix and add tin oxide.

NO. 6

Chalk	400 grams
Calcium chloride	60 "
Tri calcium phosphate	100 "
Pulverized carnauba wax	30 "
Soap	50 "
Talc	200 "
Sugar	100 "
Flavors	10 "

Procedure: Mix flavors with sugar add soap and mix thoroughly. Mix the wax with the talc thoroughly, add the tricalcium and mix thoroughly. Add the chalk and calcium chloride. Mix thoroughly and sift.

NO. 6 (ACID)

Cream of tartar	350 grams
Milk sugar	300 "
Colloidal clay	375 "
Flavor	8 "

Color if desired (usually pink)

Procedure: Add flavors to milk sugar and mix. Mix cream of tartar with the clay and mix both mixtures together thoroughly. Sift.

In addition to the foregoing there are a number of tooth powders designed for special oral conditions, but these were purposely omitted because their sale is usually limited.

What's New in Medicines

(*Continued from page 26*)

Corbasil—Colorless, tasteless, odorless, white crystalline powder, easily soluble in water and alcohol; insoluble in ether; melting point 178° C.; sensitive to alkalies even when present in very small proportions. Chemically it is orthodioxyphenylpropanolamine hydrochloride. Used in admixture with novocaine, for example in one cc. 0.02 gram novocaine, 0.0002 gram corbasil, 0.002 gram sodium chlorate and 0.004 gram potassium sulfate. Corbasil is superior to novocaine, is not so toxic and lowers blood pressure suddenly. For local anaesthesia; infiltration into mucous membrane aided; also anaesthesia in oral, nasal and other cavities. I. G. Farbenindustrie A.G., Frankfurt-am-Main, Germany.

Konasol—Contains eucalyptol, quinine preparation, menthol, camphor and paraffin oil. For colds and catarrhs as well as resulting suppuration of maxilla and frontal cavities in head; also purulent inflammations of tonsils as well as resulting conditions, such as articular rheumatism, inflammations of linings of heart, inflammation of lungs, cardiac weakness and circulatory disturbances; also spinal infantile paralysis and epidemic stiff neck, cerebrospinal menengitis. Dose, two to three drops daily. Dr. Koester & Co., G.m.b.H., Berlin-Wilmersdorf.

Gynarcopan Geburtszaepfchen—Package contains two suppositories of different strength and composition. No. 1 contains 0.59 gram quinine hydrochloride, 0.015 gram narcaricine (chemical compound formed from agaric acid and morphine derivative of reduced potency) 0.02 gram ethylmorphine hydrochloride, 0.02 gram papavarin, 0.003 gram scopolamine hydrobromide, 0.3 gram diethylbarbituric acid, 0.3 gram dimethylaminophenyldimethylpyrazolone, 0.1 gram bismuth oxide and cocoa butter. No II contains 0.3 gram of quinine hydrochloride, 0.0005 gram scopolamine hydrobromide, 0.15 gram dimethylaminophenyldimethylpyrazolone and 0.05 gram ethylmorphine hydrochloride. First suppositories serve to increase labor pains as well to alleviate pain. Second suppositories used half to two hours before expected delivery and solely to alleviate pain. Chemisch-pharmazeutische Laboratorium Hermann Thiemann, Luensen ad. Lippe.

Identhesin—In crystalline or powder form. Ethyl para-aminobenzoate. E. Schnell Chemische Fabrik G.m.b.H., Berlin-Hohenschoenhausen.

Gurgelsalz—Dr. Adam—Artificial preparation. In packages containing 95 grams. Contains sodium chloride, potassium chloride, calcium chloride, magnesium chloride, lithium chloride, sodium bromide, sodium carbonate, potassium carbonate, ferrous sulfate, potassium sulfate and magnesium sulfate. Gargle, inhalant and spray for nose. For irritations of mucous membrane of nose, mouth, throat, larynx, air tubes and bronchial tubes, principally in catarrhs of respiratory organs; also in throat catarrhs, grip, whooping cough and other infectious diseases of similar character. Property of preparation to prevent decomposition of food and formation of tartar makes it useful in compounding mouth washes and tooth preparations. Bineuco Gesellschaft fuer Chemish-Technische und Pharmazeutische Praeparate m.b.H., Wiesbaden.

Agfa

AROMATIC CHEMICALS OF THE UTMOST PURITY

For the Development of:

Violet

Viorrison A
Orrison M
Vetirisia
Iralone
Agfarnette
Benzyl Alcohol
Neovertine
Jasmin Basis 12
Vetivol
Pseudo Irone

Muguet

Mugone
Cyclamal
Iso Butyl Furyl Propionate
Muguet I
Citronellol Rosee
Jasmin Basis 42
Jasmenol
Phenyl Ethyl Alcohol
Viorrison A
Benzyl Acetate Ia
ex Benzyl Alcohol
Aldehyde C 11

Sweet Pea

Benzyl Acetate Ia
ex Benzyl Alcohol
Heliotrope Crystals
Viorrison A
Vanillose
Cumarin
Phenyl Ethyl Alcohol
Citronal
Floranol
Cyclamal
Carnetton
Arosol

Lemon for Cream

Citronal
Arosol
Bigarol
Aldehyde C 16

Eau-de-Cologne

Citronal
Bigarol
Neroli Base 111
Aldehyde C 10
Arosol

Dianthus (Carnation)

Carnetton
Pimenol
Citronellol Rosee
Mugone
Aldehyde C 11
Benzyl Alcohol

Narcissus

Narcissin K
Phenyl Ethyl Alcohol
Benzyl Acetate Ia
ex Benzyl Alcohol
White Lilac K
Methyl Anthranilate
Dimethyl Anthranilate
Aldehyde C 9

Rounded out formulas based on the above will be furnished on request.

GENERAL DRUG CO.

170 Varick Street
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907 Elliott Street
Windsor, Ont.

556 W. Congress Street
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Phone: HArrison 7441

EMBODYING

the Perfection

THAT APPEALS TO WOMEN . .

BEAUTIFUL in form, color, crystalline radiance – delicate vehicles of lovely perfume—SOLVAY SNOWFLAKE CRYSTALS makes bathing more beneficial to the skin by imparting to bath water a luxurious softness. In every detail that wins the favor of women, modern bath crystals made with SOLVAY SNOWFLAKE CRYSTALS are unsurpassed. The pleasing qualities it adds to the bath assure steady repeat sales.

SNOWFLAKE CRYSTALS also stands high in the favor of bath crystal manufacturers because of the merchandising and selling qualities it possesses. SNOWFLAKE CRYSTALS is an ideal carrier of perfume and color and is especially appropriate for display in modern containers and transparent packaging material.

Let your business benefit from the sales-making attractiveness of this ideal bath-crystal base. Write today to Dept. B-5 for prices and full information.

SOLVAY SALES CORPORATION
Alkalies and Chemical Products Manufactured by The Solvay Process Company
61 Broadway New York

Solvay
TRADE MARK REG. U.S. PAT. OFF.

SNOWFLAKE CRYSTALS
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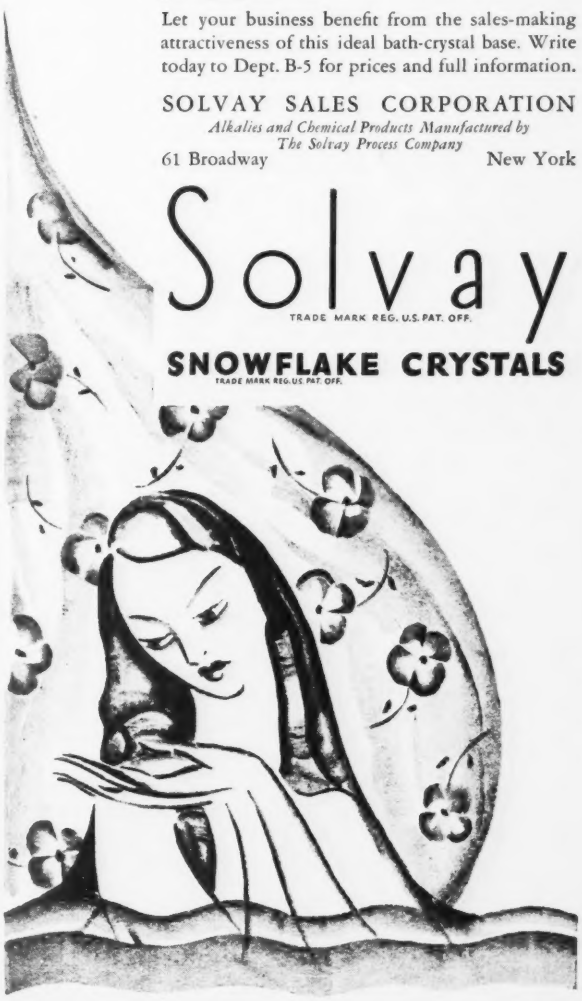


Management Forum

By Francis Chilson
Production Engineer

Powder Packaging

One of the most efficient boxes we've examined is Bourjeois, Evening in Paris. The box is a two piece plug bottom box. coming completely assembled from the box makers. However, instead of taking the box apart as most manufacturers do, the cover is left on and the box is filled through the bottom. A girl drops the plug in place, another takes a glued label from a small gluing machine and rubs it into place. That's all there is to it. No drum to pull out of the bottom before filling, no drum to glue in afterwards, no tops to put on. Pretty smart I call it.

Preserving Pills

We have this one from F. E. "Durez" Brill, that distinguished young savant—we almost said "savage"—from North Tonawanda. It seems that when Chlorosalstrerol went smart in a green Durez box, it was learned that the green box somehow preserved the pills at full strength two or three times longer than ordinary materials. That sounds much like F. E. B.'s neat little promotional truches but this yarn happens to be 105% true. It would be tough on Durez Green if closer investigation revealed that the tight closures made possible by plastic materials had as much to do with preserving the pills as the color of the package.

Marinello Moves

Karl Peehl, F. M. of Marinello, tells us that Marinello has moved its plant over among the beer gardens of Hoboken where it is to be united with the manufacturing facilities of Inecto Inc., the parent company. Whereas Marinello formerly employed several floors in its layout, the new plant is a single floor affair. Karl has made a pretty slick layout and has promised to give us the story next month.

Speaking of Layouts

We'd like the opinions of you who have had experience with both single floor and multi-floor layouts. Which really is most economical? The multi-floor layout is prettiest and eliminates a lot of pumping and conveying problems. But it has been our experience that to secure these benefits a lot of valuable space is often wasted. Offsetting, in part, the economies of gravity flow is the indubitable fact that what comes down must first go up. If you have liquid flowing down through pipes from operation to operation, you must first lug that liquid to the top floor in drums or else dump it on the first floor and pump it up to the top. So that the conveying problem seems to cancel out or at least to resolve itself into the question as to whether it is cheaper to use conveying or pumping equipment for raw materials or to use it for work-in-process and finished product. There's another interesting point for you fellows to chew on, namely, it is impossible to have complete gravity flow in any drug or cosmetic plant. Even where several floors are available, there's always some pumping or lifting to be done during manufacture or packaging. Then again, there are many products which pass through so many operations during manufacture that if you had a floor for each operation, you'd have a factory as high as the Empire State.

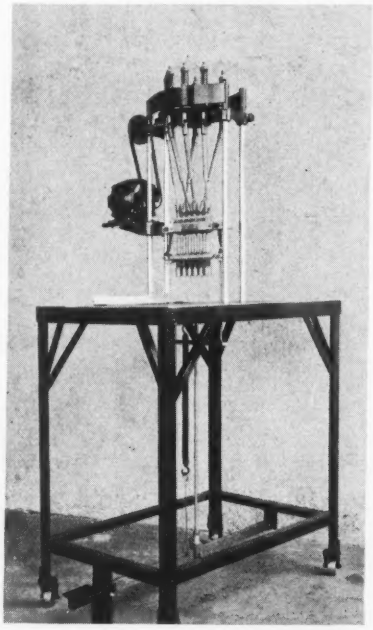
Without doubt you've got to have more handling equipment on a one floor layout and it takes much more ingenuity to make an efficient single floor layout than it does a multi-story layout. Complicating the problem still further is the fact that modern buildings are very often parsimonious of head room. In the old days when space wasn't so precious, factories used to be built with fourteen or sixteen feet of head room. Now twelve or twelve and a half seems to be the limit. Such modern manufacturing buildings as the Starrett Lehigh and the Port of New York Authority Commerce Building have only twelve and a half. These low ceiling heights often complicate a one floor layout —especially where a foot of the head room is wasted by cross-beams and another foot is occupied by a sprinkler system.

We'd like some of you to chip in with your pros and cons. We'd also like to make clear that single floor layouts do not always mean single floor buildings. Many multi-floor plants are layed out as single floor layouts, all the operations pertaining to a given product being completed on one floor. Sometimes a combination of the two is worked out in multi story buildings.

But if you were moving your plant today and had a choice between forty thousand feet of space on one floor and the same amount divided up into five floors, which would you select?

Tray Capper

Those of you who are plagued with the job of capping small bottles like those used for nail polish, iodine, mercurochrome, will be interested in a tray capper just placed on the list by Fowler. This



Fowler Tray Capper

machine has a series of adjustable chucks—you can get from three to nine on standard units—fitted with flexible shafts so that the chucks can be centered for different sized bottles. All of the chucks are driven by a single belt. All you have to do to operate the unit is to take the tray of filled bottles, place it in position beneath the capping chucks, press a foot pedal and the job is done. There is no re-handling of bottles.

Fowler is the outfit that built the automatic filling and capping units for Cutex which were described in this department some time ago. Another interesting Fowler job is the barrel type emulsifier, particularly suitable for emulsifying products containing long filament mucilages like Irish Moss and the like which are likely to be destroyed in ordinary emulsifying machines because of their tendency to break up the mucilage filaments too minutely.

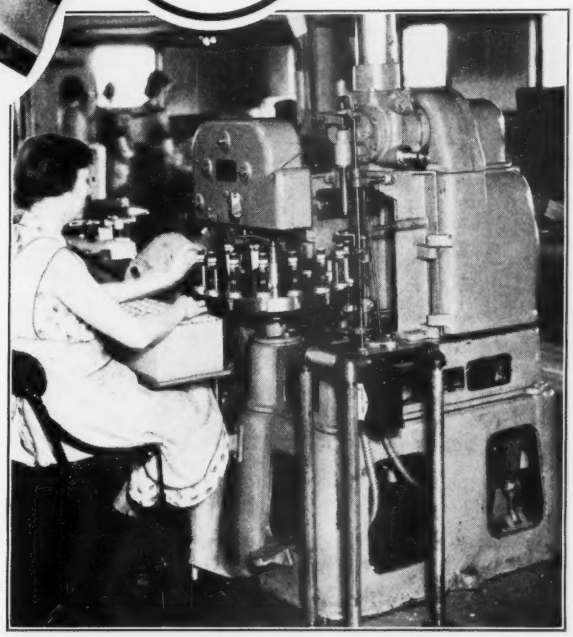
The STOKES Clipless Closure

U. S. Patent No. 1,852,225
(other patents pending)

ECONOMICAL—Saves clip costs, investment in clipping devices, and production delays due to clips.

SECURE—Metal of tube itself is formed into a clip and crimped together into a neat, tight seal by deep indentations which do not encroach upon edges of folds. Highly leak-resistant. No cracks or pin holes.

Send for sample tube sealed with STOKES Clipless Closure



The installation view shows the new STOKES 90-D Filling and Closing Machine, which applies the "Diamond-Lock" Quadruple-fold or Tuck-Type Clipless Closure, operating on Burma-Shave tubes at the plant of the Burma-Vita Co., Minneapolis, Minn. Says Mr. C. M. Odell, President of the Burma-Vita Co., ***"Your machine is doing practically a perfect job."***

FEATURES—Stokes 90-D Filler and Closer

ACCURATE—Simplified filling mechanism—without reciprocating nozzles or hoses. Handles many difficult materials: facial clays, eye salves, etc. Operator compensates for any variations in material consistency by simple thumb screw adjustment, without stopping machine.

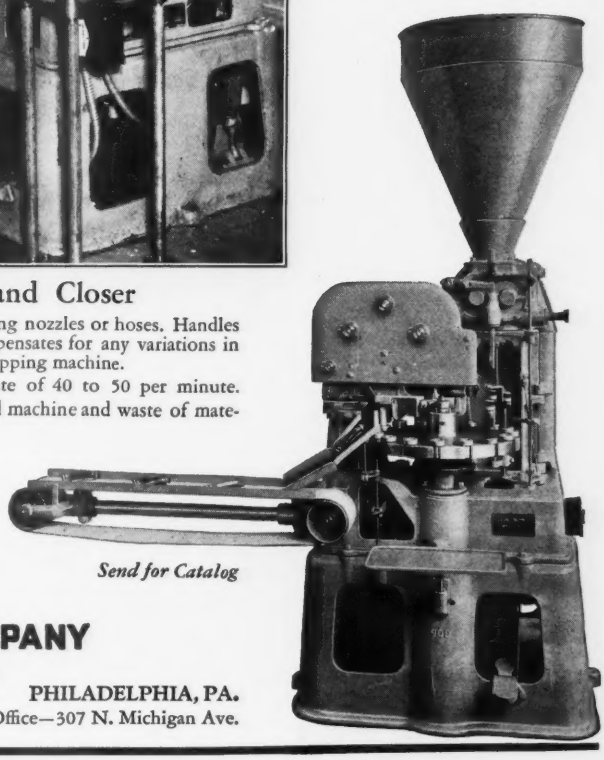
FAST—Fills, closes and seals smallest to largest size tubes at rate of 40 to 50 per minute.

CLEAN—"No tube-no fill" control prevents spillage; avoids soiled machine and waste of material. Special nozzle valve, closing under an adjustable pressure, prevents soiled tubes due to "stringing" of material.

FLEXIBLE—Handles practically any material from thin liquids to heavy facial clays and tubes from ½ inch to 1½ by 7 inches. Simplified and accessible adjustments permit quick "change-over."

DURABLE—Simple, sturdy construction, amply strong for 1½ in. tubes, assures convenient operation, low maintenance costs and long life.

ECONOMICAL—Only one operator. No clip expense.



Send for Catalog

FJS STOKES MACHINE COMPANY

Packaging Equipment Since 1895

5932 TABOR ROAD **OLNEY P. O.** **PHILADELPHIA, PA.**

New York Office—103 Park Ave. Chicago Office—307 N. Michigan Ave.
Los Angeles Office—1231 E. 7th St.

Nothing Can Stop Us

Among the noteworthy advances of the past year the work of Dr. J. A. Nieuland of Notre Dame University in the production of synthetic rubber capable of withstanding kerosene and gasoline, and especially his work in the production of a lacquer which is said to have greater resistance to abrasion than steel, and when used as a metal coating is said to be perfectly immune to attack by such powerful acids as sulphuric, hydrochloric, etc.

The Mellon Institute announced that the introduction of sugar into concrete increased its strength 66%. The same outfit also announced that lactobacillus causes 60% of tooth decay.

H. E. Sheldon of the Alleghany Steel Co. discovered a process of plating ordinary steel with stainless steel thereby making possible cheap corrosion proof tanks and kettles.

Dr. F. F. Lucas of the Bell Telephone Laboratories developed an ultra-violet microscope of such delicacy that perfect, crisp micro-photographs of 6,000 diameters can be made with it. When this device is made commercially available it ought to reveal much we need to know concerning colloids, bacteria, and raw material structures.

J. B. Phillipson and Dr. J. W. Woodrow, Iowa State College developed a method of detecting the presence of Vitamin A, with the aid of a spectroscope.

Drs. Newton Gaines and L. A. Chamers, of Texas Christian University discovered a method of killing bacteria through the use of high frequency waves of such high intensity that they are inaudible. Milk was sterilized in this manner without impairing vitamin content.

A process of recovering milk of magnesia from sea water has been worked out by the Marine Chemicals Corp. of San-Francisco. This paste is remarkably smooth and free from impurities. It has been used for tooth paste and straight milk of magnesia. This is just one of a number of chemicals produced from sea water by the above company.

Addenda

Link Belt recently perfected a screw conveyor known as the Helical Rotor which makes possible the conveying of powders in two planes, horizontal and vertical, much after the manner of the Redler. This unit however employs ordinary helical screw propellors, but we have been given to understand that they are much tighter than is common and in consequence do a cleaner conveying job.

Pneumatic Scale has added several new machines to its extensive line and we expect to have the dope on them shortly. Incidentally, Pneumatic's Redler Conveyor has created more discussion than any other unit in the history of conveying—more perhaps than any other single machine in the history of production machinery of all kinds. And discussion has led to an extraordinary number of sales in many different industries, thus proving its versatility.

It may surprise some of you to learn that the Jones cartoning machine is now adjustable so that it is no longer a single purpose machine and can be employed on installations where several sized packages must be turned out on one machine. In view of the fact that Jones for many years was one of the strongest advocates of single purpose machines, we think this change of policy significant.

Now we hope that the cartoning machinery companies will come across with a workable semi-automatic model which could be applied to a diversity of products in small run production. We know that this is a tough assignment but we expect that some day soon the trick will be turned by Jones, Pneumatic or Reddington.

Presidential Prejudices

We read in the newspapers the singular proviso that manufacturers, who agree to co-operate under the provisions of the Three Billion Buck Public Works Bill, are being asked *not* to increase their use of automatic machinery. In some instances this proviso is being written into government supply contracts. That floors us completely. It strikes us as being reactionary nonsense. We don't believe automatic machinery ever threw anybody permanently out of work and our belief is based on figures adduced by many competent authorities during the Technocracy ballyhoo. We have been under the impression that economists pretty generally had agreed that the depression and the consequent unemployment was caused basically by the fact that our means of exchange—and not our production facilities—had gotten out of whack.

We've knocked about quite a bit from industry to industry, and with the exception of the textile and the automotive industries, we've never seen any that was even *adequately* equipped, much less over-equipped.

The trouble with the automatic-machinery bugaboo is that so much misinformation is given out about it that lay people, who have no means of knowing the facts, think that every industry is as completely automatic as the automotive and the textile.

Instead of discouraging the use of automatic machinery, the government should encourage its use. Certainly the government should not foster a popular prejudice by inferring that machinery is one of the causes of unemployment. There are, of course, some very interesting and easy processes which have been mechanized, but on the whole machinery has been applied largely to the high speed and the laborious operations. In spite of unemployment there are a lot of laborious, dirty, and uninteresting operations which you could not hire men to do; they'd rather live on charity or walk the streets.

Then again, what of sanitary conditions? Isn't it true that the cleanliness of well-kept, modern plants is primarily due to the fact that work is done quickly by machinery instead of by hand? Suppose we went back to the greasy pitchers for filling ointments and creams; suppose the automatic wrapping machines were chucked out and all our bread was wrapped by hand? The answer is simply that our products couldn't possibly be packaged as cleanly by hand as by machinery. Finally, there are many of our products so dependent upon automatic or at least automatically controlled machinery, that we couldn't make the products without the equipment. The government can't stop progress by making laws against it whatever may be the maladjustments during the rehabilitation period. A couple of popes tried issuing bulls against progress and the bulls turned out to be boomerangs.

This department stands for more and better machinery. We'd be glad if we could get an automatic machine to write the plagued thing.

Polyglycol in Alcoholic Perfumes

Polyglycol is a solvent made by the polymerization of ethylene glycol. It has boiling point of 210° to 250° C. flash point of 120° C., specific gravity of 1.114 20/4° C. It consists mainly of diethylene glycol, can be mixed with water and alcohol in any proportions, is practically odorless and has consistency of glycerin. It is particularly useful as ingredient of perfume compositions for perfuming cosmetics, being added to prevent separation of components of perfume mixture. Such perfume compositions undergo separation in cold, as for example Portugal hair lotions, containing 45% alcohol, which gives milky turbid product after subjection for one hour to 0° C. Same preparation, containing 35% alcohol and 10% polyglycol, remains practically clear under same conditions.

Compound Licorice Syrup

Compound licorice syrup is made from 120 grams fluid extract of licorice root, 60 drops fluid extract of coriander, 35 drops fluid extract of fennel, 3 grams fluid extract of cardamomum seed, 1.5 grams fluid extract of anise seed, 3.6 grams sodium biborate and 1,000 grams simple syrup. Another method is to dissolve 1 part licorice root in 1 part water and then to add 17 parts simple syrup and 12 parts purified honey. Also a few drops of anise oil and fennel oil are added.

ROSS *Change Can Mixers*

No. 30C—45 Gallon Heavy Duty Mixer—Motor Drive

For Mixing TOOTH PASTE, VANISHING CREAMS, OINTMENTS, ETC.

The Ross Change Can Mixer is adaptable for many purposes, and for a vast variety of materials.

Change Can Mixers are built in sizes ranging from the Laboratory size, with a container holding 1½ gallons, to our very large Machines with containers holding 65 gallons.

All of our standard Change Can Mixers can be furnished when desired with cans and blades of acid resisting metal, or with hard wood tubs and blades.

We can also supply close fitting covers for the cans.

Catalog sent on request

CHARLES ROSS & SON COMPANY

83 EMERSON PLACE BROOKLYN, N. Y.

'Phone: Prospect 9-8400

Conveyors and Packaging Belts

Finishing Belt Conveyor

Important equipment at a time like this, are conveyors and packaging belts!—saving labor and time, cutting the corners that often mean the difference between loss and profit on your merchandise.

They enable fewer people to turn out more work. They organize your force into a 100% producing unit. They set the pace that gives you the production you want.

Kiefer Conveyors are made especially for this work. Kiefer engineers can show you how they will save money in your plant.

Our catalog shows all types with full details and interesting plant installations.

The Karl Kiefer Machine Co.

Cincinnati, Ohio

News

People

Dr. Bliss Joins Webster

Dr. A. Richard Bliss, Jr. has presented his resignation, effective August 15, 1933, as Chief of the Division of Pharmacology in the University of Tennessee to accept the position of Director of the Research Laboratories of the William A. Webster Company of Memphis.

Dr. Bliss was graduated in pharmacy from the New York College of Pharmacy and received his doctor of pharmacy degree at Columbia. He holds the master of arts and L.L.D. degrees from Howard College and is a graduate in medicine of the University of Alabama.

He has taught at Columbia, Alabama, Emory University and the University of Tennessee, where he has been dean of the College of Pharmacy for the past seven years. He is the author of more than 70 scientific articles and four standard text and reference books and has also invented several scientific devices.

From 1917 to 1928 he served as associated referee on alkaloids of the Association of Official Chemists and he also directed the physiological and pharmacological studies of the Commonwealth Fund of Pennsylvania. In 1930 he was a member of the U. S. Pharmacopoeia revision committee. He is a past president of the Tennessee Academy of Science and is director of the Reelfoot Lake Biological Station. He is a fellow of the American Association for the Advancement of Science and of the American Museum of Natural History and a member of many leading scientific societies and the International Narcotic Education Association.

The William A. Webster Co. is at present building a $20,000 addition to its plant which will be equipped as a modern research laboratory to be ready September 1.

Dr. A. Richard Bliss, Jr.

Dr. Schneller Joins McKesson

Dr. M. R. Schneller has joined McKesson & Robbins as Director of Laboratories and Research. Dr. Schneller obtained the degree of Doctor of Finance and Political Economy at Heidelberg in 1916; degree of Ph.D. at Leipzig in 1920; and degree of M. D. at Berlin in 1923.

Dr. Schneller came to this country in 1923, and was Assistant Professor of Materia Medica and Pharmacology at the University of Michigan from 1924 to 1927, following which he was connected with Parke Davis & Co. until October, 1931. Since that time Dr. Schneller has been a consultant for many drug firms as well as for the Department of Commerce.

Peter Dirr Recovers

Peter A. Dirr, vice-president of Charles L. Huisking & Co., who was taken ill May 28 with pneumonia, has completely recovered. Mr. Dirr left the city June 30 for a month's rest and is expected to be back at his desk about the first of August.

Peter A. Dirr

McClure Again Heads Glass Ass'n

W. H. McClure, Hazel-Atlas Glass Co., has been re-elected president of the Glass Container Association while George F. Lang, Carr-Lowrey Glass Co., Baltimore, has been elected a director of the association.

Frederick J. Lueders Now V. P.

Frederick J. Lueders, son of the late George Lueders, and formerly assistant secretary, has been elected vice-president of George Lueders & Co., New York. George J. Waegelin has been elected to the board of directors to fill the unexpired term of the late George Lueders.

Kallman Joins Amer. Advert. Prod.

L. R. Kallman, formerly of Kissproof, Inc., has joined American Advertised Products, Inc., as vice-president and sales manager. J. Leslie Younghusband, also formerly with Kissproof, is president of the company.

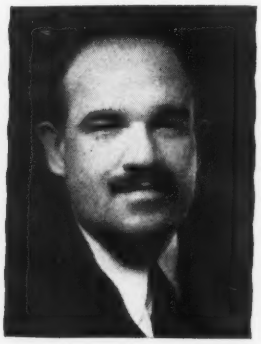
Thurston Merrell Addresses Graduates

Thurston Merrell, vice-president in charge of sales and advertising of The Wm. S. Merrell Co. was the principal speaker at the commencement exercises of the Cincinnati College of Pharmacy. His subject was "The Outlook for Pharmacy."

Several days before commencement, members of the graduating class were guests of the Merrell company at a banquet held in the exclusive Cincinnati Club banquet hall, later making an inspection tour of the main laboratories in Cincinnati, and also of the new Biochemical and Research Laboratory at Reading, Ohio.

Colonel Solon Now

F. J. Solon, sales manager of the Owens-Illinois Glass Co., has been elevated to the rank of Kentucky Colonel. Governor Ruby Laffron of Kentucky conferred this honor upon Mr. Solon because of Mr. Solon's interest in the development of industry in Kentucky.



F. J. Solon

It is said that the Colonel really bears his title with much dignity, but is very lenient regarding the matter of salutes or of friends addressing him by his new title.

R. S. Nelson Quits Northam Warren

Robert S. Nelson, for ten years with Listerine and later with Dew, has resigned to accept a sales position representing Northam Warren Sales Corp. in the Philadelphia, Baltimore, Washington and Pittsburgh territory.

Rubinstein to Europe

Helena Rubinstein sailed for Europe, July 6, accompanied by her elder son, Roy Titus.

Innis, Speiden Advances Frost

Pickney L. Frost has been appointed assistant manager of sales, Innis, Speiden & Co., New York. He was formerly manager of the Cleveland office.

No. 2 Rotary Tablet Machine

New and Improved!

We have no yearly models—but improvements and refinements are being constantly added to Colton machines.

There are over five hundred Colton Rotaries in use.

Superior design, sturdy construction and ease in operation have made this possible.

The No. 2 Rotary Tablet Machine has such desirable features as *positive pressure*, eliminating varying thicknesses of tablets; *hardened steel gear drive*, eliminating frequent replacement of worms used on other makes, and *sliding upper punch holders*, to hold the punches rigidly, enabling the manufacture of special shaped tablets most satisfactorily.

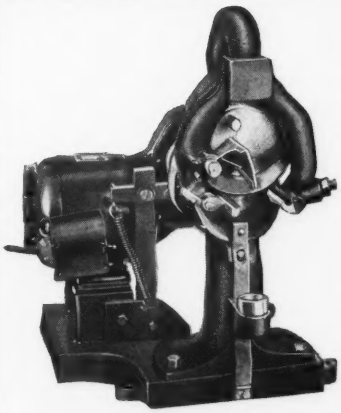
Write for Catalogs.

ARTHUR COLTON COMPANY

2620 East Jefferson Ave.

Detroit, Michigan

NEW!! #5A DIRECT MOTOR DRIVEN Tube Closer & Folder



Our new No. 5A Direct Motor-driven Folder and Closer has a capacity of up to 40 tubes per minute. Can be equipped with a Clipless Attachment at slight additional cost. An exceptionally compact unit, occupying a minimum of space. Foot pedal, not shown, supplied with each motor-driven machine.

Combined with our No. 8A Standard Tube and Jar Filler and No. 4A Clip Fastener, both motor-driven, this makes the most economical and efficient complete unit on the market today. Send for Catalog No. 5 which also contains specifications on:

Paste and Cream Mixers	Rotary Pumps
Portable Electric Mixers	Centrifugal Pumps
Bottle Fillers	Filling, Closing and Clipping Machines, hand and automatic
Powder Fillers	Powder Mixers and Sifters
Ointment Mills	Jacketed Kettles
	Glass Enameled Tanks

GEORGE G. RODGERS CO.

183 VARICK STREET — NEW YORK CITY

WAlker 5-6892 — Established 1890

ERTEL LIQUID HANDLING EQUIPMENT ERTEL

Portable Bottle Fillers — Portable Mixers — Pumps — Asbestos Disk Filters

Allegheny Stainless Steel Tanks — Jacketed Tanks — Glass Lined Tanks

NEW MODEL "E" FILTER

The new "Model E" asbestos disk filter has many refinements. It will stand greater pressure—there are fewer clamping nuts to contend with—the overflow pan is stationary. Equipped with pump for transferring liquids when not filtering. Filter sheets quickly changed.

Have you tried the Ertel American Made Asbestos Filter Disks?

Ask us to tell you more about Ertel Asbestos Filter Disks and Ertel Liquid Handling Equipment . . . this will place you under no obligation.

ERTEL ENGINEERING CORPORATION

108 EAST SIXTEENTH STREET

NEW YORK N. Y.

Neutral Asbestos Filter Sheets—Portable Mixers

C. H. Palmer, Ellis Island Chairman

Carleton H. Palmer, president of E. R. Squibb & Sons, is chairman of the committee investigating conditions on Ellis Island.

Carleton H. Palmer

Webster Wax & Oil Co. Formed

James A. Webster, formerly sales manager of Koster-Kuenen, Sayville, L. I., has organized the Webster Wax and Oil Co., Inc., with offices in the Starrett-Lehigh Building, 601 West 26 st., New York.

The company is engaged in the bleaching of beeswax, and is also prepared to supply the trade with other waxes, mineral oils and petrolatum.

R. I. Estrin—Sales Mgr., Para Labs.

Richard I. Estrin is now sales manager of Para Laboratories, Inc., New York.

Maurice Levy Represents Worth

Maurice Levy, New York, has been appointed sole agent in this country for the Worth line.

Dr. Guenther Marries

Mr. and Mrs. Samuel F. Streit of New York have announced the marriage of their daughter, Miss Nanette Streit to Dr. Ernest S. Guenther, chief research chemist of Fritzsche Bros., Inc., New York.

H. J. Moller—Sales Mgr., Princess Pat

Henry J. Moller has become sales manager for Princess Pat, Ltd., Chicago.

W. E. Jewett Rejoins Industrial Chem.

W. E. Jewett has rejoined the Industrial Chemical Sales Co., New York, in an executive capacity.

Murray Breese Opens Business

Murray Breese, formerly advertising manager and director of professional service of Health Products Corp., Newark, N. J., has resigned from that position to enter the advertising business for himself, with offices at RKO Building, Rockefeller Center, New York.

He has specialized in the marketing of ethical specialties and has built a wide reputation of outstanding authority in the promotion of ethical products. In his new capacity he will act as consultant to manufacturers of ethical specialties or concerns with semi-ethical products, wishing to reach the physician, the dentist, the hospital, or nurse with their products. His service includes counsel, copy, placing, marketing and plans.

He will continue to act as adviser for Health Products Corp. on its ethical products.

Associations

A. M. T. A. Conference Postponed

Associated Manufacturers of Toilet Articles has announced a postponement of its trade practice conference until sometime in September. The statement accompanying this announcement read in part as follows:

"It should be borne in mind that the activities of the A. M. T. A. in trying to formulate a code of ethics to rid the industry of malpractices, not only antedates the policies of our present Federal administration, but the activities of the Drug Institute as well.

"The A. M. T. A., after its many years of work on these subjects, came to the conclusion months ago that the steps which they now propose were in keeping with business ethics and fair practices.

"During the past few weeks the original idea for a Drug Institute has become a matter of fact, and this organization is now actively engaged in a complete survey of every branch of the drug and cosmetic industry. At a meeting of its board of directors last Thursday it complimented the A. M. T. A. upon the work it has done, but suggested that inasmuch as the Drug Institute will combine in its membership every branch of the industry it might be better for the A. M. T. A. to postpone its own appeal to the government until this broader organization has drafted its own code, which would include those matters of importance particularly concerning each individual branch of the industry, and it has furthermore asked the A. M. T. A. to leave with it the code of ethics which has already been drafted.

"Consequently, in view of the cordial reception and interest expressed, as well as the willingness to cooperate on the part of those retailers assembled Wednesday, June 14, with the trade practice committee of the A. M. T. A., as well as the suggestion of the board of directors of the Drug Institute, the A. M. T. A. has decided to ask for a postponement of its hearing with the Federal Trade Commission until September, but will in the meantime work closely with the Drug Institute in the formation of its code, as well as with the retail and wholesale distributors of drugs and cosmetics."

Mutual Wholesalers Prepare Code

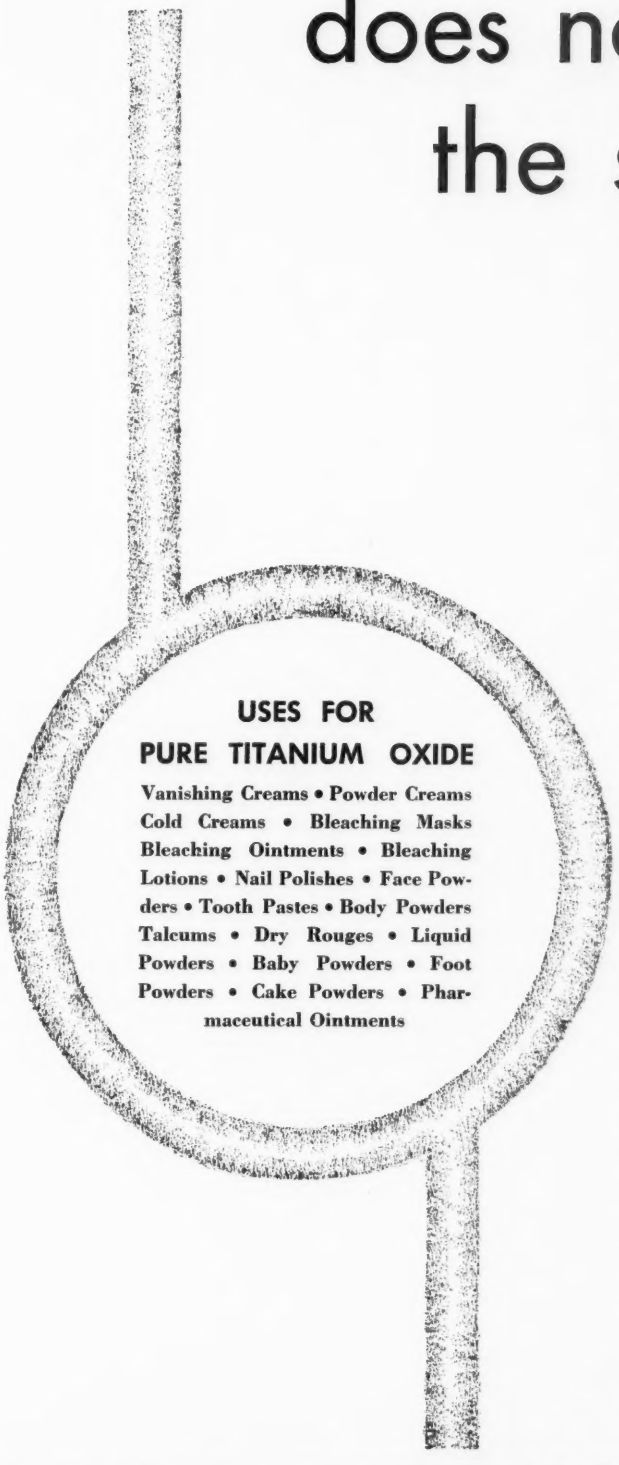
With all but one of the companies composing the Federal Wholesale Druggists Association represented in a meeting held in Cleveland, June 27 and 28, sixty representatives of the cooperative wholesale drug trade approved a code of fair competition to be submitted to the National Recovery Administration. This movement was declared to be necessary "to obtain the benefits of the industrial recovery act for the 12,000 independent retail druggists who are stockholders and members" in the F. W. D. A. group.

In an opinion given at the meeting, E. C. Brokmeyer, counsel of the association, said that it would be difficult for retail druggists to get the benefits of the recovery act otherwise than by means of a code embracing them as members of cooperative wholesaling concerns doing an interstate business.

A draft of a code had been prepared by a committee consisting of J. P. Jellenek, Minneapolis, chairman; F. T. Roosa, Cleveland; S. C. James, Buffalo, and A. E. James, Baltimore, assisted by the secretary of the association, R. E. Lee Williamson, and its counsel, E. C. Brokmeyer.

One of the rules adopted on behalf of retail druggists provides for a minimum price schedule based on the minimum price or manufacturer's list price plus cost of doing business (27½ per cent of gross sales), plus interest on the capital invested and a reasonable net profit. A rule adopted on behalf of cooperative and mutual wholesale druggists declares that additional employment and an increase in the minimum wage scale to 25 cents an hour, with a forty-four hour week maximum, may be effected by adopting the following:—Average gross profits on sales, 16⅔ per cent; expenses, wages, and commissions, 14 per cent; net profits on sales, 2 per cent; four to eight times turnover of net worth sufficient for from 6 to 8 per cent dividends on capital investment plus income taxes. A six-day week is required to serve customers and the public. Another rule on behalf of cooperative and mutual wholesale druggists declares that the sale of merchandise below its cost, plus the cost of doing business, interest on the capital invested, and a reasonable profit, is an unfair method of competition. The same rule was adopted with respect to manufac-

This finer, whiter pigment does not irritate the skin...


USES FOR
PURE TITANIUM OXIDE
Vanishing Creams • Powder Creams
Cold Creams • Bleaching Masks
Bleaching Ointments • Bleaching
Lotions • Nail Polishes • Face Pow-
ders • Tooth Pastes • Body Powders
Talcums • Dry Rouges • Liquid
Powders • Baby Powders • Foot
Powders • Cake Powders • Phar-
maceutical Ointments

● Pure Titanium Oxide has received the endorsement of an important group of cosmetic manufacturers who use this modern pigment in the formulation of superior products free from irritating effects. ● Because it is chemically inert, Pure Titanium Oxide will not produce unpleasant effects on the most sensitive skin. It will not react with other ingredients and cause chemical changes, rancidity or deterioration. This pure white pigment also has exceptionally fine particle size and high tinting strength. For this reason, only small amounts are required to produce desirable effects. It is unexcelled in covering power and adhesion. ● Pure Titanium Oxide is manufactured under strict laboratory control to assure a product of highest purity and uniformity. It has a definite place in improving the appearance, texture and color of a long list of products. ● It will pay you to investigate Pure Titanium Oxide and learn how it can improve your products.

TITANIUM PIGMENT CO., INC.

Manufacturers of TITANOX-B (Barium Base)
TITANOX-C (Calcium Base)... PURE TITANIUM OXIDE

111 Broadway, New York, N. Y.; Carondelet Station, St. Louis, Mo.; Pacific Coast Distributor: National Lead Co. of Calif., 2240 24th St., San Francisco, Calif.; Canadian Distributor: Wilson, Paterson, Gifford, Ltd., 101 Murray St., Montreal—132 St. Helen's Ave., Toronto, Ont.

PURE TITANIUM OXIDE

turers. Another rule for manufacturers declares that the distribution of drug products shall be confined to the essential channels of drug distribution.

At the Cleveland meeting, the association approved the following expression with reference to the Drug Institute:—

The Federal Wholesale Druggists' Association is of the opinion that the Drug Institute of America can serve a very desirable purpose, and that the general fundamental ideas are sound and should be given close consideration, but that this association is of the opinion and takes the definite stand that the retail druggists of the country must have a more powerful voice in the affairs of the Drug Institute of America and his interest receive first consideration.

Collapsible Tube Association

The Collapsible Tube Manufacturers Association, Inc., has been organized with the following officers: president, Stanley Rumbough, White Metal Manufacturing Co.; vice-president, Frederic Remington, Peerless Tube Co.; directors, H. S. Darlington, A. H. Wirz, Inc.; H. P. Scott, Jr., Bond Manufacturing Corp.; and George DuBoff, Art Tube Co. The executive secretary-treasurer of the association is Melville D. Church of Washington, D.C.

A special temporary trade practice committee consisting of Tracy Sheffield, New England Collapsible Tube Co., chairman; Joel Kronman, Victor Metal Products Corp.; William M. Rose, Sun Tube Corp.; Chas. A. Tome, Bond Manufacturing Corp.; and A. W. Paul, Wheeling Stamping Co.; has submitted a code for operation under the Industrial Recovery Act, together with trade customs, uniform contract and quotation forms, and a code of ethics. The code specifies a 40-hour week and $15 a week minimum pay. The committee appointed to consult with government officials on the code consists of the executive secretary, Melville D. Church, Tracy Sheffield, and William M. Rose.

Beauty & Barber Mfrs. Organize

Allied Manufacturers of the Beauty & Barber Industry has organized with the following officers: president, Geo. D. Chisholm; vice-president, J. A. Ladds; treasurer, J. E. Dwyer; secretary, J. A Mitchell.

The Code of Fair Competition which is framed to comply with all of the conditions of the National Industrial Recovery Act provides for a division of the industry into seven groups as follows: Group A. Chairs, Furniture and Fixtures; B. Permanent Wave Machines; C. Hair Dryers, and mechanical Equipment; D. Cosmetics, Soaps, Hair Preparations and Lotions; E. Hair Dyes; F. Rinses, Henna, Dye Soaps, etc.; G. Hair goods, Hair nets, Cutlery, Combs, Pins, Brushes, etc. The offices of the Allied Manufacturers are at 36 West 44th street, New York City.

Barry Makes "Birdie"

While Charles E. Kelley, of Hagerty Brothers with a gross 91 was the winner, and Bud Alvarez, of Graselli, was second with a gross 92 at the first golf tournament of the season held by the Chemical Salesmen's Association at Hempstead, L. I., no one equalled the record made by Bill Barry, of Mallinckrodt, when he made

Wm. D. Barry

a new type of birdie by lifting his ball with a midiron and bringing down on the fairway a bird that was flying through the air. Immediately there was a rush to sign him up for duck hunting in the fall and allowing him to compete with a midiron and golf ball against those armed with shotguns.

Other winners in the tournament were Ed. Orem, of Du Pont with low net at 74; second R. E. Dorland with net 76; third, A. H. Rowe. Kickers prices were won by Ira Vandewater, J. C. McKenna, and U. A. Mohr.

Smallest number of puts was won by H. A. Merritt with 31, and largest number of puts was won by Ira P. MacNair with 40.

H. A. Gogarty won low net for guests with 76.

The July 11 tournament at the Ridge-Club, N. J., was featured by the fact that President Barney Gogarty won a prize—for golfing. It was, to be exact, third low net. Billy Atkins had low net and John R. Eldridge, second low net. Charlie Kelly (the Red) won the prize for low puts.

Low gross was won by Bob Brewer with Jack Leppart, second. Bud Alvarez won the kicker's, with Grant Dorland, second, and Oscar Lind, third.

Committee to Control Distribution

At the request of John A. Goode, President of the National Association of Retail Druggists, a committee representing manufacturers of medicinal products, proprietary medicines and toiletries has been formed to discuss the sale and distribution of the aforesaid products through wholesale and retail grocers, confectioners, tobacconists and sundry other retail outlets with other committees to be formed by: National Wholesale Druggists Association, Federal Wholesale Druggists Association, National Association of Retail Druggists, Associated Chain Drug stores, Affiliated Drug Stores.

The following gentlemen have accepted membership on the Manufacturers' Committee: S. L. Antonow, Pres. American Druggists Syndicate, Long Island City; Harry H. Caswell, Vice-Pres. & Gen'l. Mgr. W. F. Young Co., Springfield, Mass.; Stanley I. Clark, Sales Manager, Lehn & Fink, New York; J. DeCesare, Vice-Pres. Health Products Corp., Newark, N. J.; R. D. Keim, Vice-Pres.-Director of Sales, E. R. Squibb & Sons, New York; Nathaniel Nicolai, Vice-Pres. Hynson, Westcott & Dunning, New York; J. S. Norton, Vice-Pres. Lambert Pharmacal Co., New York; Montague Sterling, Pres. E. Fougera & Co., New York; J. T. Woodside, Pres. The Western Co., Chicago.

It is the intention of this Committee of Manufacturers to act in concert and cooperate with the plans now being formulated by the Executive Committee and Board of Directors of the Drug Institute of America in accordance with President Roosevelt's National Industrial Recovery Act.

Cosmetic Associations Combine on Credit

Associated Manufacturers of Toilet Articles has consolidated its office with the Credit Bureau of the Perfumery Importers Association, in the new Rockefeller Center development, New York.

Chemical Exposition Set

The Fourteenth International Exposition of Chemical Industries will be held at the Grand Central Palace the week of December 4, 1933.

Michigan Golf Winners

The first golf tournament of the Michigan Cosmetic and Extract Association was held at the Lakewood Golf and Country Club, Tecumseh, Ontario, Thursday June 15th, and attended by about thirty members and guests.

Prizes for low gross, hidden hole, kickers handicap etc., were won by: Jeff Snyder, W. H. Elliott, John Vicary, W. I. McDonald, R. M. Stevenson.

Hy-Pure Elects

National Guild of "Hy-Pure" Druggists has elected the following officers for the coming year: president, John G. Pantzer, Jr., Indianapolis; vice-president, W. E. Heyn, Detroit; secretary, Gus W. Reif, Cincinnati; treasurer, Charles Bauer, Akron. Charles Ehlers of Cincinnati was reappointed Chairman of National Drug

Powco Brand Products

Neutral Powdered Soaps

As producers of the widest range of powdered neutral soaps, we can duplicate exactly or furnish from standard production, the exact soap characteristics you require.

Tested Persian Quince Seed

No one can judge the mucilaginous quality of Quince Seed simply by looking at it. There are several types of seed. The best is one of the true Persian varieties.

Seed that has been cleaned and rubbed may look fine—but most of its mucilage (which is on the surface) may be gone.

Powco Brand Tested Persian Quince Seed assures you real buying economy.

Concentrated Shaving Cream Base

A perfected, easily compounded, concentrated product affording you 20 to 30% saving, without risk of production failures, compared with buying finished cream in bulk.

JOHN POWELL & CO., Inc.

114 East 32nd Street, New York, N. Y.

Sales Co., a subsidiary of the National Guild of Hy-Pure Druggists; and Arthur Sarsfield of Cincinnati, Chairman of the National Guild Advertising Committee.

Powder Puff Association

Powder Puff Manufacturers Association has been organized with the following officers: president, Joseph E. Valentine, Oxzyn Co.; vice-president, Joseph Gosin, Downypuff Corp.; treasurer, A. L. Siegel, A. L. Siegel Co.; secretary, B. Levitt, Jeanette Powder Puffs, Inc.

The following companies are members: Jeanette Powder Puffs, Inc., Baronet-Lorna Co., Inc., Oxzyn Co., Downypuff Corp., The Western Co., Columbia Plush & Puff Co., Inc., Furlager Mfg. Co., Universal Powder Puff Co., Dora May Co., The Hygienol Co., Inc., A. L. Siegel Co., Inc., Monarch Specialty Mfg. Co., Plaza Powder Puff Co., A'Cadia Powder Puff Co., and F. Tetter & Son.

Companies

Scott & Bowne Control Changes

The British firm of Scott & Bowne, Ltd. has purchased all the assets, rights, etc. of Scott & Bowne, Frankfurt, Germany. This again puts the London house in complete control of the production and distribution of Scott's Emulsion throughout all of Europe and the other markets controlled from there prior to the war. The German house was taken over by the German Government during the war and the business was disposed of to German interests, but now it comes back under the original control.

The transaction was negotiated by Charles L. Huisking during his recent trip to Europe.

Escho Becomes Smith

The Smith Crude Drug & Spice Corp. has been formed in New York city to succeed the Escho Corp. Offices have been opened at 155 John street; the telephone number is John 4-2870.

Officers of the new concern are:—President, Henry Smith; vice-president, O. Smith; secretary-treasurer, E. Eschenbach. Edward Frank, for many years manager of the New York office of McIlvane Brothers, Philadelphia, will be connected with the sales organization of the corporation.

Korn Representing Waters

Waters Merchandising Corp., New York, announces the appointment of Herman C. Korn as representative for Denver, west. The Southern Sellers, headed by J. E. Muniot, Jr., have been appointed as representatives from Alabama to Texas and Beach Gill has been made sales manager and New York representative.

Norwich in Canada

Norwich Pharmacal Co., Ltd., of Canada, has elected the following officers for the coming year; president, William G. Peckham; vice-president, Oliver W. Benedict; treasurer, Robert S. Eaton; secretary, J. Fred Windolph; assistant treasurer and assistant secretary, T. M. Weems.

This subsidiary company, wholly owned and controlled by the Norwich Pharmacal Co. of New York, has been incorporated under the laws of Canada for the manufacture and sale of a number of the leading specialties of the Norwich Pharmacal Co. which for some years have been in increasing demand in Canada. Mr. Oliver W. Benedict, the vice-president of the new corporation, will have direct charge of this Canadian business.

New Phoenix Cap

Phoenix Metal Cap Co., Chicago, is offering a new straight-sided, all-metal cap, which is the first cap of this type ever made with a knurl, or any other form of projection to aid in removing the cap

from the package. The Phoenix Company, which claims to be the first to offer the double shell cap, offers this as an improvement which will be appreciated by manufacturers and consumers alike.

The diamond knurl is being supplied in all bottle sizes of the S T cap—from No. 18 to No. 33. No extra charge is being made for the knurl which is optional.

Industrial Chemical in Columbus

Industrial Chemical Sales Co., New York, has opened a branch office at 370 West Broad st., Columbus, Ohio, with Richard N. Stathan in charge.

Carter & Weston Join A.N.A.

Carter Medicine Co., New York, and the Western Co., Chicago, have been elected to membership in the Association of National Advertisers. Henry H. Hoyt, managing director of the former company, and Kenneth Laird, vice-president of the latter company, will represent their respective organizations in the A. N. A.

Henry Yates Coming to New York

The Vick Chemical Co., Greensboro, N. C., announces that portions of its sales and advertising departments will be moved to New York about the middle of August.

H. B. Yates, vice-president, in charge of sales department; W. S. Dickson, in charge of the advertising department and A. T. Preyer, assistant to President Richardson, will be among those going to New York.

Stafford Allen Centenary

Stafford Allen & Sons, Ltd., London, is celebrating the hundredth anniversary of its founding. To commemorate this occasion the company has published a beautifully illustrated booklet entitled, "A Century of Service," which should be of unusual interest to buyers of English botanicals and essential oils. Copies may be obtained upon request.

Nauheim Reorganizes

Nauheim, Inc., a reorganization of Nauheim Pharmacy, Inc., New York, has been chartered with $25,000 capital. William H. Bowden, 109 Pine Grove street, Jamaica, L. I.; John J. J. Macoline, 1141 Seventy-ninth street, Brooklyn; and Frederic Wingersky, 6 Beacon street, Boston, were named as directors and subscribers. Nauheim Pharmacy, Inc., a subsidiary of Nauheim Pharmacies, Inc., filed a voluntary petition in bankruptcy April 8 in the Federal Court, this city, listing liabilities of $275,347, and assets of $57,233, plus inventories valued at $247,712.

Verley Representing Christoff

Albert Verley, Inc., Chicago, has been appointed exclusive United States and Canadian representative for Christo Christoff, Kazanlik, Bulgaria, distiller of otto of rose.

Peek & Velsor Expand

Peek & Velsor, Inc., New York, has enlarged its quarters at 100 Gold st., that city, as a result of increased business.

Trade Literature

BOONTON MOLDING BOOKLET

Boonton Molding Co., Boonton, N. J., has published a 26-page booklet which combines the features of a catalog of the company's facilities with technical and commercial information concerning various types of molded products and materials. This instructive booklet may be obtained upon application to the company.

IT'S A FUNNY THING!

Investigation has disclosed the fact that some dentifrice manufacturers have not actually checked the raw products, particularly chalk, which go to make up Tooth Paste for many months and sometimes even years. They buy a brand and assume they are getting materials which meet their requirements because they once did, and don't take the trouble to check them. They accept CHALK on faith. Do you?

As manufacturers of SNOW TOP Brand of Precipitated Chalk we welcome constant checking, secure in the knowledge that month after month, all shipments will be uniform to your specifications in:

Color — *Freedom from Grit*

Purity — *Adsorptive Properties*

Cleanliness — *Binding Power*

Physical Characteristics

SNOW TOP CHALK is made in America---snow white, grit free---by American machinery and workmen. By the way, don't lose a moment's sleep about how sufficient the supply because our plant is big enough to supply our present customers and also take over all the chalk orders which reach our shores from abroad---and then some.

INDUSTRIAL CHEMICAL SALES COMPANY, INC.

230 Park Avenue, New York — **205 W. Wacker Drive, Chicago**

SNOW TOP

PRECIPITATED CHALK

CRETA PRÆCIP U. S. P.

A. M. A. Accepts

P. D. ANTITOXIN

Erysipelas Streptococcus Antitoxin, and Sal Ethyl Carbonate, manufactured by Parke, Davis & Co. The latter provides the antipyretic and analgesic effects of the salicylates. It is relatively insoluble in water and in the acid secretions of the stomach, whereby the disagreeable taste and local gastric symptoms of the soluble salicylates are practically avoided. For cases requiring a rapid analgesic and antipyretic effect rather than salicylate saturation, tablets sal-ethyl carbonate with amidopyrine are supplied.

A. M. A. Rejects

EUPHYDIGTAL

Euphydigtal (Byk-Guldenwerke, Berlin, Germany; Byk, Inc., New York, American agents; Adolphe Hurst & Co., Inc., New York, General Distributors) because it is an irrational mixture of digitalis and a theophylline preparation marketed under an uninforming, proprietary name, with exaggerated and unwarranted claims for its therapeutic value.

BURNHAM'S SOLUBLE IODINE

Burnham's Soluble Iodine, marketed by the Burnham Soluble Iodine Co., Auburndale, Mass., because they are semisecret preparations marketed with extravagant and unwarranted therapeutic claims.

NAIODINE

"Naiodine" manufactured by Emile Logeais Laboratories of Boulogne sur Seine, France, distributed in the United States by E. Fougera and Company, because it is an unscientific preparation of uncertain composition (rules 1, 2 and 10), for which unwarranted and fantastic therapeutic claims are made (rule 6); and because it is marketed under an objectionable proprietary name (rule 8).

VICRIS

Vicris, manufactured by Vi-Cris, Inc., Detroit, because it is a mixture of unscientific composition, undeclared on the label or in the advertising (rules 1, 2 and 10); because it is marketed under an uninforming, proprietary name (rule 8) with exaggerated and unwarranted claims (rule 6).

ALPHA-LOBELIN

Alpha-Lobelin, marketed by Ernst Bischoff Co., Inc., because it is marketed with unwarranted therapeutic claims.

New Products

VIN-A-BALM

V. Vivadou, Inc., Long Island City, is offering a new anti-sunburn preparation under the trade name, "Vin-A-Balm."

KALMS

Johnson & Johnson, New Brunswick, N. J., is now marketing a new product called "Kalms," for the relief of periodic pains.

DUZIT PRODUCTS

Duzit Laboratories, Seattle, is introducing three new products under that name, a styptic lotion, a foot lotion, and a deodorant.

WEST COSMETICS

West Cosmetic Co., Inc., New York, is introducing a new line of cosmetics under that name.

CASTILIAN PRODUCTS

Castilian Products Corp., Hollywood, is now marketing a complete line of cosmetic items, including soaps, tooth pastes and shaving creams, under the names "Castilian" and "Hollywood Girl." Officers of the company are president, A. Nassour; vice-president and general manager, William Nassour; secretary-treasurer, Fred Nassour.

MILTON PRODUCTS

Milton Chemical Co., Milton, Pa., is introducing a new tooth paste and a new deodorant.

AMUR NASAL PRODUCTS

Amur, Inc., New Rochelle, N. Y., is introducing a new product under that name for the relief of hay fever, sinusitis and catarrh.

MINT-O-LENE

White Seal Laboratories, Grand Rapids, is marketing a new mouth wash and gargle under the name, "Mint-O-Lene."

Removals

C. G. EULER

C. G. Euler, New York, has announced removal of his offices to 4 Platt st., that city.

ATLANTIC PHARMACAL CO.

Atlantic Pharmacal Co., Boston, "Apco" products, has moved to larger quarters at 204 Milk st., that city.

CLIFTON HOGSHEAD CHEM. CO.

Clifton Hogshead Chemical Co., formerly of Norfolk, Va., dentifrices, has moved to its new plant at Waynesboro, Va.

LA GERARDINE

La Gerardine, Inc., New York, has moved to new and larger quarters at 155 East 44th st., that city.

MAISON JEURELLE

Maison Jeurelle, "Seventeen," has moved its headquarters from Chicago to New York. The new quarters are at 551 Fifth avenue, in the latter city.

FIRST MACHINERY CO.

First Machinery Corp., New York, announces that it has moved its executive offices and showrooms to new and larger quarters at 419 Lafayette st., that city. The company will have a complete machine shop at its new quarters and by this move consolidates its Brooklyn and New York warehouses under one roof.

WHELAN DRUG STORES

Whelan Drug Stores, Inc., has announced the removal of its executive offices to 330 West 42 st., New York.

Governmental

Commerce Department Cut

The Bureau of Foreign and Domestic Commerce of the Department of Commerce has been cut in half by dismissal notices, and complete re-organization of the commodity divisions is expected by July 15.

Of the 835 employees in the Washington office of the bureau, 435 were dismissed, and there is possibility of still further curtailment of personnel if government income does not meet current expenses, for the department has not yet come within the figure set for it by the Bureau of the Budget.

The chemical division retains its identity, for the present at least, but it is cut from 16 to 6 persons, and its budget will be 60 per cent less than at present. Those remaining in the division will be C. C. Concannon, chief; T. W. Delehanty, whose position of assistant chief is abolished; J. W. Wizeman, E. C. Wood, Miss A. H. Swift, and one stenographer.

Alcohol Control Changes

An end to both the Bureau of Prohibition and the Bureau of Indistrial Alcohol and a return to the original form of administration of the permit feature of the prohibition law has been ordered by President Roosevelt.

In an executive order effective August 10, he abolished both bureaus and merged their functions with other activities of the Department of Justice and the Treasury Department. All supervision of permits has been taken from the Department of Justice and placed with the Treasury Department, and activities of the Department of Justice in detecting and prosecuting nonpermittee violations of the prohibition law will be conducted by the Bureau of Investigation. This department's prohibition force will be absorbed, as much as possible, by the Bureau of Investigation, although it is expected that the total force will be greatly reduced.

The Bureau of Industrial Alcohol is merged with the Bureau of Internal Revenue. Technically, as in the case of the two Department of Justice agencies, both bureaus are abolished and a new one created; but, practically, all employees required will be continued in their present capacities.

It is expected that James M. Doran, Commissioner of Industrial Alcohol, will

ROSE

ROSE B . . . . . $4.00 lb.

Possessed of an unusual power of overcoming many objectionable odors, Rose B has been tested successfully for use in salves, ointments, depilatory creams, brilliantines, shampoos, bath salts, insecticide sprays and similar preparations.

ROSE E . . . . . $8.00 lb.

The Briar Rose (Wild Rose) note. The exact similation of the natural floral odor was impossible until the development recently of a new chemical body.

ROSE R . . . . . $12.00 lb.

An exceptionally fine Red Rose. It has been prepared particularly for good quality creams, in which it produces to a remarkable degree the Rose odor.

FOUGERE

FOUGERE B . . . . . $5.00 lb.

Recommended for medium and low priced talcums and face lotions.

FOUGERE E . . . . . $7.00 lb.

Characterizing the note sought after today in building up a successful line of products for use by men—after shaving lotions, shaving creams and talcum powders. Fougere "E" is a complete odor in itself.

FOUGERE R . . . . . $12.00 lb.

A slightly stronger and more lasting type than Fougere "E" but of the same fine character. Used advantageously in cosmetics for men.

JASMIN

JASMIN B . . . . . $3.00 lb.

A low priced Jasmin—unequalled as to sweetness, unusual strength, lasting qualities and faithfulness to type. It can be used in hair and nail preparations, lotions, sprays, medicated products, etc.

JASMIN E . . . . . $6.00 lb.

The essence of freshness—Jasmin "E" is absolutely non-discoloring or non-irritating in any preparation and possesses a fresh green note that is imparted advantageously to the product.

JASMIN R . . . . . $9.00 lb.

The most modern Jasmin note—embracing many newly developed synthetics, so essential in moulding the deep fruity richness indispensable today.

Let Us Send You Testing Samples!

UNGERER & CO.

13-15 West 20th Street, New York

be continued in charge of alcohol permit work. He was in charge of the technical division of the dry enforcement work, when it was once before a unit in the Bureau of Internal Revenue.

Details of the reorganization plan have not yet been perfected, but it is probable that the permit supervision work will be placed with a new unit of the Bureau of Internal Revenue; although it is possible that it will be simply a division of the existing miscellaneous tax unit. If a separate unit, it will be headed by a deputy commissioner, who likely will be Mr. Doran. While the bulk of the personnel will be retained, increased efficiency resulting from the consolidation may result in some dismissals both at headquarters and in the field.

This executive order returns the permissive provisions of the prohibition laws to the internal revenue service where they started and where they would be in the event the eighteenth amendment is repealed and taxes only are involved. However, violations of the law by others than holders of permits will be under investigators of the Department of Justice rather than the permit inspectors of the Treasury Department. This is expected to result in smoother enforcement. Since enactment of the Williamson law three years ago, supervision of permits has been divided between the two departments.

The new Commissioner of Internal Revenue is Guy T. Helvering while the Assistant Secretary of the Treasury in charge of customs, internal revenue, alcohol and narcotic work is Stephen B. Gibbons.

June Drug Seizures

The Federal Food and Drug Administration caused the seizure in June of 111 consignments of foods and drugs found to violate the national pure food and drug law, according to W. G. Campbell, Chief. The Administration also sent to the Solicitor of the Department of Agriculture recommendations for prosecution of cases involving 50 stocks of foods and drugs and one of an insecticide. Notification was received from Federal courts of the termination of six criminal prosecutions of violators resulting in fines ranging from $50 to $300.

Federal seizures in June, according to Mr. Campbell, included a wide variety of medicinal products recommended for such diseases or disorders as headaches, asthma, hay fever, neuritis, nervous ailments, rheumatism, diabetes, skin disease, pyorrhea, and other diseases of the mouth, as well as poultry tonics and other livestock remedies, so-called, and considerable stocks of foods which were found to be adulterated or misbranded.

N. Y. Sales Tax Book

Distribution of 20,000 printed pamphlets containing the State Tax Commission's regulations governing the new 1% retail sales tax was begun July 10, Mark Graves, President of the Commission announced.

The pamphlets, which will be of use to retailers and others required to make returns under the new law, are being distributed through the district offices of the Tax Department in New York, Brooklyn, Utica, Syracuse, Rochester and Buffalo, as well as the main offices at Albany, Commissioner Graves said.

In addition to the regulations the pamphlet contains a series of explanatory questions and answers dealing with particular problems which might arise under the new law. The booklet is thoroughly indexed.

Financial

Drug, Inc., Dissolves

Dissolution of Drug, Inc., a $150,000,000 holding company, and the reestablishment of its five principal operating subsidiaries as independent companies is planned in the near future. Stockholders will vote on the proposal on Aug. 7 in Wilmington, Del.

The five companies will be Sterling Products, Inc., United Drug Co., Bristol-Myers Co., Vick Chemical Co. and Life Savers, Inc. The proposed segregation is said to be the largest voluntary dissolution of a holding company in this country.

In 1928 the parent company was formed through a combination of Sterling Products and United Drug. Subsequently, the holding company acquired Bristol-Myers, Vick and Life Savers.

For each ten shares of Drug, Inc., capital stock, shareholders will receive fourteen shares in the new corporations, as follows: Five shares of Sterling Products, four of United Drug, two of Vick, two of Bristol-Myers and one of LifeSavers.

Drug, Inc., listed total assets of $150,627,017 in a pro forma balance sheet giving effect to a reduction in capital stock and certain adjustments and write-offs approved by stockholders last March 14. Its net profit available for dividends last year was $13,467,092. Its capital stock consists of 3,501,499 outstanding shares of $10 par value. The capital surplus is $26,790,658 and earned surplus $24,924,232.

Capitalization of the five new corporations are: Sterling 1,750,700 shares of $10 par value; United Drug, 1,400,560 shares of $5 par; Bristol-Myers, 700,280 shares of $5 par; Vick 700,280 shares of $5 par, and Life Savers, 350,150 shares of $5 par.

Drug, Inc., will transfer to each new company all capital stock it holds of the present subsidiaries in exchange for stock of the new companies. This new stock will then be distributed among the stockholders of Drug, Inc.

The new corporations will be under managements which will include the executives now respectively conducting the existing units.

Commercial Solvents Buys Rossville

Commercial Solvents Corp. has entered into an agreement to acquire the industrial alcohol business of the Rossville Alcohol and Chemical Corp. The property to be transferred also includes the New Orleans plant, the plant of the California subsidiary and certain of the current and working assets of the Rossville company and its subsidiaries, including inventories.

As consideration for the transactions, Commercial Solvents is to deliver 105,000 shares of its capital stock and cash in the amount of the book value of the current and working assets to the Rossville company.

The proposed sale of assets was approved by holders of a majority of the preferred and common stock of the Rossville company at a meeting July 18.

Holders of a majority of Rossville company common stock approved the transaction, on condition that the holders of substantially all the preferred stock will consent to accept, on any further distribution of assets of the company, $10 in cash and one-half share of Commercial Solvents stock per share of preferred stock, in lieu of the stated distributive value of the preferred stock.

The assets of the Rossville company and subsidiaries not covered by the agreement with Commercial Solvents consist principally of cash, notes and accounts receivable and the plants at Lawrenceburg, Ind., and Carnegie, Ohio, and certain other facilities which may be adaptable to the manufacture and sale of alcoholic beverages.

With the acquisition of the new plants, Commercial Solvents and its subsidiaries would operate eight plants. The principal plant is at Terre Haute, Ind., in the heart of the corn belt, and was purchased from the government at the end of the World War.

WAFER JOINS ROSSVILLE

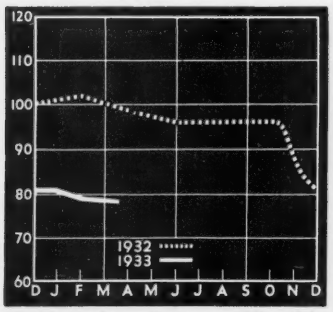
Joseph M. Wafer, for a number of years sales manager of the Industrial Chemical Co., New York, has recently become sales manager of the Rossville Commercial Alcohol Corp. He began his business career in 1917 with Ralph L. Fuller & Co., remaining with this firm until 1921 when he joined William S. Gray & Co. In 1924 he became associated with the Industrial Chemical Co., as assistant sales manager. When Rossville Commercial Alcohol Co. purchased the alcohol department of Industrial Chemical he went with the former company, remaining until April 1931,

ADVERTISEMENTS — *Each article on this page is a paid advertisement.*

ALCOHOL NEWS

JULY ★ A Monthly Series of Technical Articles for Chemists and Executives ★ 1933

ETHYL ALCOHOL PRODUCTION



(*moving twelve-month averages, 1931 = 100*)

		1933	1932
PRODUCTION			
1000 proof gals.	Jan.-April	32,343	43,227
	April	9,012	10,137
	March	8,229	9,526
SALES			
1000 proof gals.	Jan.-April	29,094	32,245
	April	6,667	7,530
	March	7,751	8,124

LARGER DEMAND EVIDENCED

The above figures show a greater percentage decrease in production for the first four months of this year than is reported for sales. This tendency to hold production closely in line with consuming requirements has improved the statistical position of the market which, combined with a general rising price trend for commodities and raw materials, gives a strong undertone to the alcohol market.

For some time a good demand for alcohol has been evidenced by the rayon producers, and recently there has been a more active demand chiefly for a variety of alcohol-derived chemicals from other sources due to the improved position of most of the important consuming industries.

Current quotations at producing points to September 30th are as follows:

Ethyl, 190 Proof tax paid	
Tanks	$2.375 per gal.
Drums, car lots	2.415 per gal.
Less car lots	$2.435–2.535 per gal.
S. D. No. 1	
Tanks	29.5¢ per gal.
Drums, car lots	33.5¢ per gal.
Less car lots	35.5–41.5¢ per gal.

(Anhydrous 5¢ higher)

ALCOHOL CONTROL REMAINS WITH TREASURY DEPARTMENT

In an executive order effective August 10th, President Roosevelt returned the administration of the permit feature of the prohibition law to the Bureau of Internal Revenue under the Treasury Department, and terminated the present Bureaus of Prohibition and of Industrial Alcohol. The activities of the Prohibition Department in detecting and prosecuting violations will after that date be conducted by the Bureau of Investigation, and the licensing functions of the Bureau of Prohibition are transferred to the Bureau of Internal Revenue.

Details of the reorganization plan have not been perfected, but it is expected that the greater part of the present personnel of the abolished bureaus will be continued under the new order. It is considered likely by the Washington press that Mr. James M. Doran will continue in charge of alcohol permit work.

NEW REGULATIONS PERMIT PURE ALCOHOL IN PRESCRIBING OF MEDICINAL LIQUORS

U. S. I. Prepared to Meet Increased Demand for Prescription Alcohol with Five Well-Known Brands

The new Regulations No. 11 of the Copeland-Celler Law, which became effective May 15, 1933, allow druggist permittees to fill prescriptions for pure alcohol as may be ordered for medicinal purposes by practicing physicians for internal and external use.

"H" Permit Regulation Change

The following change in the regulations affecting "H" permittees was issued by General Circular No. 131 of the Bureau of Industrial Alcohol dated June 22, 1933:

"Persons holding permits of the 'H' classification for the use of twenty wine gallons or less of alcohol per annum will not hereafter be required to render reports on Form 1421 or Form 1421-A."

The amount of alcohol obtained under "H" Permits on Form 1410-A during the fiscal year will be obtained from Card Form 1502 and the total amount for the year will be entered on Form 1421-B for the month of June.

TESTING PURITY OF ETHER

Impurities in ether may be due to either lack of care in manufacturing or to modifications taking place during storage. Air and light can form hydrogen peroxide, acetaldehyde, vinyl alcohol and organic peroxides.

A quantitative test for such impurities consists of mixing 100 cc. of 20% sulphuric acid and 5 cc. of starch solution in a glass flask. 5 grams of potassium bicarbonate are added. Then 0.5 gram potassium iodide and one gram potassium bicarbonate are added. Just before gaseous evolution ceases, add 5 cc. of ether to be tested. Agitate for 10 minutes and titrate with hundredth normal sodium thiosulfate. The result is expressed in degrees of oxidation of the ether, i.e., the number of cc. of hundredth normal sodium thiosulfate required to decolorize the iodine set free by 10 cc. of ether.

Under the provisions of the new regulations the term "Spirituous Liquor" shall be construed as alcohol, whiskey, brandy, rum, gin, and such like liquor produced by distillation. Thus, the registered druggist, if a permit holder for medicinal liquor, may fill doctors' prescriptions issued for U.S.P. Pure Alcohol.

In view of the wide acceptance for products of the U. S. Industrial Alcohol Co., among the trade as suppliers of pure alcohol, the company is prepared to meet the increasing demand for pure alcohol prescribed according to regulations. Altogether the U. S. Industrial Alcohol Co. has five different brands of U.S.P. Pure Alcohol available—three of which are "cane" alcohol and two "grain" alcohol, as follows:

Sunshine Pure Ethyl Alcohol
USI-USP Pure Ethyl Alcohol
Webb's Pure Ethyl Alcohol
Sunshine Pure Grain Alcohol
Greendale Pure Grain Alcohol

These brands are available in a variety of containers, including pint bottles, 16 and 24 to the case; one-gallon tins and five-gallon drums.

The important feature of the new law is the way in which a physician having a permit may prescribe alcohol for medici-

(*Continued on Page Two*)

The latest educational window exhibit of the U. S. Industrial Alcohol Co. maintained on 42nd Street, New York City, shows every article in the model sun porch and kitchen using alcohol in some phase of its manufacture.

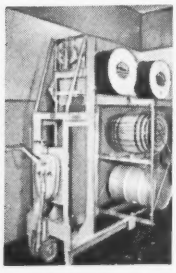
The refrigerator is stocked with foodstuffs in which U. S. P. Pure Alcohol is used in their manufacture. The refrigerator is finished in lacquer, while the brine tank employs industrial alcohol as an anti-freeze agent. The glass tank in the foreground has the refrigeration unit operating entirely under water to show the "sealed-in" features of the mechanism. The insert shows a crowd before the window.

Published Monthly by the U. S. Industrial Alcohol Co.

JULY ★ **ALCOHOL NEWS** ★ 1933

CORNER AT WORLD'S FAIR

The illustration shows two drums of PYRO, the Standard Anti-freeze, on a novel portable barrel elevator as exhibited in the Century of Progress Exposition in Chicago. This exhibit of Barrett-Cravens Company is located in the General Exhibits Building No. 1 (Minerals) just inside the North Entrance.



WIDER USE OF ALCOHOL PERMITTED BY ECONOMIES

Recent studies in the economical use and application of alcohol in two Illinois hospitals resulted in the introduction of several "savings" features in the present methods employed. These new economies in the use of pure alcohol encourage its wider use in the numerous branches of the modern hospital without entailing any additional expense.

For example, an alcohol dispenser was built, somewhat on the principle of a liquid soap dispenser, for use in cleaning surgeons' hands. The waste alcohol was drained into a funnel and was collected for use in cleaning the surgical instruments. This waste alcohol was found to be sterile after long use.

In another instance, a 15 per cent alcohol solution was found to be as efficient for back-rub purposes as the 60 per cent solution formerly used, thus permitting its freer use at no increased cost.

NEW REGULATIONS PERMIT PURE ALCOHOL IN PRESCRIBING OF MEDICINAL LIQUORS

(*Continued from Page One*)

nal purposes—the only limitation being the quantity required by the patient.

A physician holding a permit to prescribe medicinal liquors may issue a prescription at any one time for a quantity of pure alcohol which he, in good faith, believes is required by a patient for a period not exceeding thirty days. In special cases a quantity for as long as ninety days may be issued, when the physician must notify the Supervisor of Permits in writing within a period of 24 hours of the issuance of such prescription. Also the doctor may prescribe for the same patient as often as his condition requires.

* * *

A new anesthetic, tribrom-ethyl alcohol (avertin) has been extensively used in several hospitals. By injection, avertin puts the patient to sleep and he can be operated on in many cases without any additional anesthetic being administered in the operating room.

USES OF ALCOHOL IN INDUSTRY—No. 2

This is the second of a series of articles describing briefly the important contributions alcohol has made to the health and well-being of mankind.

HOSPITAL AND CLINIC

It has been many times stated and without fear of contradiction that the modern hospital and clinic could not function without alcohol. In all branches of hospital and curative practice, this essential chemical occupies an outstanding position.

Let us follow a patient through a stay in the hospital and observe the manifold applications of alcohol in the treatment and care of his ailment. Upon admission, he is taken to the examining room. The attending physician washes his hands with an antiseptic containing alcohol, proceeds with the examination and finds his patient is apparently suffering from a malignant growth.

An operation is indicated, but the diagnosis must be supported by the medical laboratory findings. A culture section and samples of the various body fluids, blood, sputum, digestive juices, etc., are obtained and sent to the laboratory, where they are submitted to the routine microscopical and chemical tests. Here again alcohol is an important accessory to the laboratory tests as a preservative, reagent and staining medium for the microscopical examination.

The case being properly diagnosed and an operation decided on, the patient's body may be washed with green soap (containing alcohol) followed by an alcohol bath to insure surgical cleanliness. If there is undue pain, a hypodermic may be administered. The narcotic drug is usually made from or by means of alcohol —and the pellet dissolved in a dilute alcohol-water mixture.

The anesthetic—ether or ethylene —is then administered. Both of these items are true alcohol products.

Immediately before the knife, the operative area is swabbed with tincture of iodine (made with pure alcohol). The surgeon's scalpel, rubber gloves and other instruments are sterilized in alcohol—and even the gut sutures for final sewing up are preserved in glass tubes containing alcohol.

In the convalescent ward, the patient will be given dressings, medicines and tonics, many of them made from or containing alcohol—together with the daily massage with rubbing alcohol to tone up and refresh the inactive muscles.

TECHNICAL DEVELOPMENTS

A new antiseptic of great power has recently been put on the market in London. It is said to have a phenol coefficient of 105 and to be antiseptic and germicidal in dilutions of one to 300, as a 5% solution in a 10% soap solution.

The material is not readily soluble in water, but may be dissolved in ethyl or isopropyl alcohol. Experience indicates that in such solutions a concentration of 0.1% is ample as a germicide and that 0.05% would suffice for an antiseptic.

* * *

Nail polish solvents are of extreme importance in manufacturing a satisfactory polish. Some of the best solvents for cellulose ester are: acetone, amyl acetate, butyl acetate, dibutyl phthalate, ethyl acetate.

* * *

Analgesic mouth wash is readily prepared with anaesthesin dissolved in alcohol. Since this substance is readily soluble in alcohol and not in water, it adheres to mucous membrane readily. A typical formula is two grams of anaesthesin dissolved in 90 parts alcohol and 20 parts water, plus suitable flavoring oil.

* * *

Ansol in conjunction with whiting makes an efficient cleaner for silver and gold-plated articles. * * *

The use of S.D. No. 1 anhydrous alcohol as a cutting and thinning agent for shellac has successfully eliminated the rust problem in connection with work on gold leaf.

* * *

An artificial musk perfume has been developed under a British Patent by introducing a tertiary butyl group into m- or p-cymene, distilling, nitrating, and purifying the nitrated tertiary butyl cymene by repeated crystalization.

* * *

A number of excellent germicides have been obtained by combining resorcinol with a variety of alcohols under a patented process. Among the resulting esters which have a high bacterial efficiency are those of amyl alcohol, benzyl alcohol, cyclohexanol and phenyl ethyl alcohol. * * *

A new type of opaque black glass has been made from blast-furnace slag. This product, produced from the waste slag of the iron and steel smelters, can now be made without the use of manganese dioxide, formerly required in the manufacture of black glass. It is stated to have a high gloss and attractive appearance which suggest its use for tile and decorative work.

* * *

A new type of lemon oil, stated to have a finer flavor, aroma and color is now available for commercial purposes. When dissolved in alcohol it is crystal-clear and has a true lemon color. It will neither cloud nor settle on standing, requires no filtration and leaves no waste.

* * *

A new X-ray paper to take the place of film in industrial X-ray work has been announced. It is stated this new paper is faster drying, more easily handled, as contrasting and fast as film, and requires only one intensifying screen. * * *

FIRE IN NEW ORLEANS PLANT OF U.S.I.

One million gallons of C. D. alcohol were destroyed when a fire caused by a bolt of lightning broke out in a huge storage tank of the New Orleans Plant of the U. S. Industrial Alcohol Co., on June 24th. The fire was confined to the storage tank only. The distillation and denaturing plants were undamaged. The entire loss was covered by insurance.

Greater production activities are now under way to replenish the quantity of alcohol lost.

U.S. INDUSTRIAL ALCOHOL CO.

WORLD'S LARGEST PRODUCERS OF INDUSTRIAL ALCOHOL

ETHYL ALCOHOL

SPECIALLY DENATURED-*All Formulas* • COMPLETELY DENATURED-*All Formulas* • ANHYDROUS-*Denatured* • ABSOLUTE-*Pure*

SOLOX-*The General Solvent* • PYRO-*The Standard Anti-Freeze*

PURE (190 PROOF) TAX PAID — TAX FREE

U. S. I.—U. S. P.-*Ethyl* • WEBB'S-*Ethyl* • SUNSHINE-*Grain* • GREENDALE-*Grain* • SUNSHINE-*Ethyl*

Executive Offices: 60 East 42nd Street, New York, N. Y. Branches in all Principal Cities.

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REFINEMENTS in manufacturing operations have led to noteworthy improvements and developments in Monsanto products for the pharmaceutical industry.

Your selection of basic materials from the following Monsanto list is assurance of ultimate satisfaction.

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Aspir Gran
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Caffeine U. S. P.
Chloramine U. S. P.
Phenolphthalein U. S. P.
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Chemicals

By Ewing Galloway, N. Y.

and that's surely O.K. with me

WHEN returned goods come flocking in, I'm the one who does the work. I don't like policies, materials or packages which make returned goods.

That's why I like Sturge's Standard Precipitated Chalk. There's never been a comeback in the eighteen years I've been here that the laboratory has traced to our chalk.

We started in using Sturge's Precipitated Chalk when this business started. Will we always use it? I'm betting we do!

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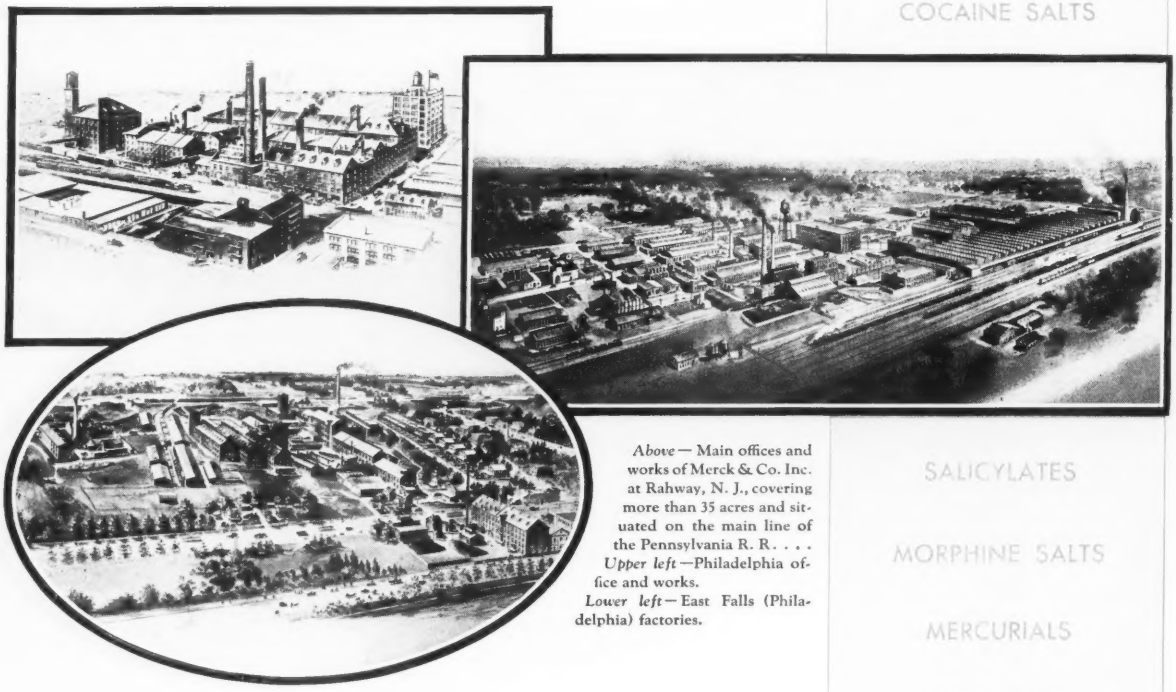
PFIZER QUALITY
U.S.P.

The HOUSE *of* MERCK

QUININE
ETHER

COCAINE SALTS



Above— Main offices and works of Merck & Co. Inc. at Rahway, N. J., covering more than 35 acres and situated on the main line of the Pennsylvania R. R. . . . *Upper left*—Philadelphia office and works. *Lower left*— East Falls (Philadelphia) factories.

SALICYLATES

MORPHINE SALTS

MERCURIALS

STRYCHNINE

IODIDES

CODEINE SALTS

BISMUTH SALTS

SILVER SALTS

CHLORAL HYDRATE

PHENOBARBITAL

RARE ALKALOIDS

ETC., ETC.

Merck & Co. Inc. is built on foundations that extend to the very beginning of modern industrial and pharmaceutical chemistry. . . The name of Merck has long been associated with Fine Chemicals, and many of the foremost commodities of today were first manufactured by one or another of the early pioneers who have since become part of the modern house of Merck. . . Dating from 1823, when American quinine was first manufactured by one of these pioneers, there has been, year by year, a memorable succession of new manufactures with which the names Merck, Rosengarten, Powers and Weightman are all identified. . . Today over 3000 chemicals are included in the Merck line. . . All conform to definite, established standard.

. . .Write for complete list. . .

MERCK & CO. INC.

MANUFACTURING CHEMISTS

Rahway, N. J.

Philadelphia New York St. Louis Montreal

when he resigned to resume his previous connection with Industrial Chemical Sales Co.

Rexall Debt Moratorium

A debt moratorium designed to strengthen the credit position of retail drug stores throughout the United States has been announced by Louis K. Liggett, president of the United Drug Co. The plan briefly provides for the freezing in of every dollar owed to the United Drug Co. by retail druggists on May 31 and the liquidation of these debts through an instalment plan.

"Our records show that about 47 per cent. of retail dealers need help," Mr. Liggett's announcement stated. "We are asking these for a simplified balance sheet showing sales, operating expenses, etc. These will be studied by a committee and an instalment plan for payment of all old debts will be developed in each case. There will be an interest charge of three per cent. per annum. The object of the plan is to place every Rexall store in a position to pay for June purchases on July 15 and take the cash discount."

Earnings and Dividends

AMERICAN PRODUCTS CO.

American Products Co. and subsidiary reported a consolidated net loss of $32,015 for the six months ended March 31, after taxes, charges and provision for bad debts. This compared with a net loss of $17,761 for the corresponding period of previous year. Net current assets as of March 31 were $673,891 and net current liabilities were $185,525 comparing with $695,022 and $138,942, respectively as of March 31, 1932.

ANSBACHER-SIEGLE CORP.

Ansbacher-Siegle Corp. has reported for year ended Sept. 30: Net loss, $50,826, contrasted with net income of $10,334, equivalent, after $2.40 convertible preference stock dividends, to 9 cents a share on 39,966 common shares in preceding fiscal year.

DOW CHEMICAL CO.

Dow Chemical Co. has reported for year ended May 31: Net profit after depreciation, Federal taxes and other deductions, $1,463,230, equivalent, after 7 per cent. preferred dividend requirements to $1.98 a share on 630,000 no-par common shares, against $2,070,884, or $2.95 a common share, in preceding fiscal year.

NORWICH PHARMACAL CO.

Norwich Pharmacal Co., reported a net profit of $233,115 for the five months ended May 31, 1933, which was equal to $2.33 a share on 100,000 capital shares.

SHARP & DOHME

Sharp & Dohme, Inc., has declared dividends of $1 a share on the cumulative convertible preference stock, series A, covering a portion of the unpaid accumulations since August 1, 1932, and also 50 cents a share for the current quarter. Both dividends are payable on August 1 to stock of record July 14.

McKesson Liquidates Bank Loans

McKesson & Robbins, Inc., has liquidated all outstanding notes payable and bank loans as of June 28, such indebtedness having amounted to $2,750,000 on June 30, 1932, it was announced yesterday. In addition the company acquired $700,000 par value of its outstanding debentures in the open market in the first five months of 1933.

Industry's Stocks Up Again

Prices of common stocks of corporations in the drugs and cosmetics industry have continued their almost weekly gain started the latter part of March, during the past month, according to the stock price indexes of the Standard Statistics Co., New York. A comparison of the drug and cosmetics index and that for 351 industrials over recent weeks follows:

(1926 average equals 100)

1933	*Drugs and Cosmetics*	*351 Industrials*
June 14	88.7	75.9
21	91.6	77.8
28	99.7	80.2
July 5	99.1	84.8
1933 High	99.7	84.8
Low	53.9	38.7
1932 High	88.3	61.6
Low	45.0	31.9

Account Changes

Tailby-Nason Co., Cambridge, pharmaceuticals, to Eddy, Rucker-Nickels Co., that city.

Godefroy Mfg. Co., St. Louis, cosmetics, to Anfenger Advertising Agency, that city.

United Advertisers, Inc., Omaha, Dr. Yates Co., St. Louis, and A'Lure Toilet Goods Co., Omaha, to Jimm Dougherty, Inc., St. Louis.

J. Schanzenbach & Co., New York, hair preparations, to Charles Austin Bates, Inc., that city.

White Seal Labs., Grand Rapids, mouth wash, to John L. Wierengo, that city.

Proctor & Gamble Co., Cincinnati, Ivory Shaving Cream, to The Blackman Co., New York.

Parfumerie St. Denis, New York, cosmetics, to Charles Dallas Reach, Newark, New Jersey.

E. R. Squibb & Sons, aspirin and liquid petrolatum, to N. W. Ayer & Son, Inc., Philadelphia.

F. J. Cheney & Co., Toledo, "Hall's Catarrh Remedy," to Campbell-Sanford, Cleveland.

Obituaries

Arthur Orr

Arthur Orr, former vice-president of the Commercial Solvents Corp., Terre Haute, Ind., died June 5 of heart trouble following several years' illness from thyroid gland disorders. He was forty-eight years old and a native of Evanston, Ill. He became associated with the Commercial Solvents Corporation in 1923, becoming sales-manager for the corporation in 1925 and vice-president in charge of sales at Terre Haute in 1927. Illness caused his resignation in 1931.

Industry's Books

Labor Economics and Labor Problems, by Dale Yoder, 630 pages, McGraw-Hill Book Co., New York, $3.50 net.

Although the author calls this an introduction to the field of labor economics, to anyone but the student or professional economist this work would be considered a complete treatise on the subject. It combines an economic and sociological approach to the study of modern labor economics and problems, while placing major emphasis on economic principles. Among the topics covered are unemployment insurance, prevailing wage bills, old age pensions, union-management cooperation, etc.

Health and Environment, by Edgar Sydenstricker, 217 pages, McGraw-Hill Book Co., New York, $2.50 net.

Although the subject has almost limitless boundaries, this review of some of the principal results of various inquiries into the relation of environment to health suggests a number of general observations which should be of interest to progressive manufacturers of this industry. One of the series of monographs published under the direction of the President's Research Committee on Social Trends.

The Master Key to Health, by Rasmus Alsaker, 416 pages, Sun-Diet Health Foundation, East Aurora, N. Y., $3.00 net.

Deals with the subject of diet and health. The addenda at the back of the book are of interest to all of those interested in foods and diets.

Raw Material Markets

Chemicals **Essential Oils** **Natural Products**
Drugs **Medicinal Oils** **Flavors**

Camphor Up With Exchange

Spot price of camphor has been going up steadily along with the advance in Japanese yen exchange. The increased cost to replace has strengthened the spot position and tended to stimulate buyers to somewhat more activity. Japanese refined slabs were quoted in New York at from 47c to 48c per pound and refined powder at from 48c to 49c.

No change was made in ½ oz. tablets this item remaining at from 55c to 56c per pound but a rise is generally expected when stocks now held on spot are cleaned out.

Approximately 60 per cent of the camphor produced in Japan during 1931 and 1932 came from the Island of Taiwan (Formosa), and the remaining 40 per cent originated in Japan proper, chiefly in the Island of Kyushu, according to Consul W. F. Mason.

During the Japanese fiscal year ended March 31, 1931, the total production of crude camphor amounted to 4,585,568 pounds. In the following year the output dropped to 3,544,997 pounds. Camphor oil production totaled 17,275,246 pounds during the fiscal year 1930-31, and 15,921,621 pounds during the fiscal year 1931-32, the percentages orf origin being the same as those of crude camphor.

Taiwan supplied a greater quantity of natural crude and refined camphor to Japan in the calendar year 1932 than in the preceeding year, although the value declined markedly. Exports from Taiwan to Japan were as follows: Camphor, 1931, 3,008,507 pounds; 1932, 3,138,202 pounds. Exports of camphor direct from Taiwan to the United States declined from 1,814,-918 pounds in 1931 to 1,483,360 pounds in 1932, while shipments to other countries gained from 299,820 pounds, to 580,346 pounds, respectively.

Increased exports of camphor from Japan proper occurred in 1932, the total amounting to 3,107,287 pounds, compared with 2,783,615 pounds in 1931. Shipments to the United States declined, however, to 1,089,905 pounds from 1,383,-809 pounds in 1931.

The future of Japan's camphor supplies depend largely upon plans for afforestation, since up to the present time the natural camphor forests have undergone a rapid depletion and much of the easily available timber has been chipped. It is difficult, therefore, to estimate the potential exports of the industry.

Prices and Imports

Gold plays the tune and prices dance. And the music is pleasantly rhythmic to those who have taken inventory losses in the past. Improved business and improved sentiment, activity in the World Economic Conference, whether success or failure, strength and intelligence in Washington, are being increasingly reflected in all price indexes. For July, the index of 50 commodities rose three whole units to 61, a level not touched since the beginning of 1932.

Medicinal chemicals stepped up to 67.6 from 64.0 in June. There were no lowered prices, while bismuth, cod liver oil, cream of tartar, iodine, menthol, mercury and quinine salts were raised.

Essential oils at 44.2 in July contrasted with 41.6 in June, the largest single increase for a long time. Anise, cassia, citronella, lemon and peppermint sold at higher prices.

Botanical prices advanced to 70.4 from 69.8 in the previous month. Agar, buchu, digitalis, ergot and rhubarb were raised.

Cosmetic raw materials also participated in the parade, the unweighted index rising to 63.9 from 63.1 in June. Copaiba declined, but arabic, balsam Peru, menthol and tragacanth rose.

The adjusted index of quantities of botanical imported was 99.4 in May contrasted with 68.7 in April, while values were 43.2 in May as against 46.7 in April.

Essential oil imports—quantities—were at 116.1 in May, compared with 85.6 in April, while values were 47.0 and 28.1, respectively.

Iodine Higher

The almost sensational advance in sterling resulted in a substantial increase in the cost of crude iodine. The domestic manufacturers of iodine preparations, therefore, raised their prices several times during the past month to cover the higher cost of raw material. The following schedule now prevails for prompt shipment:

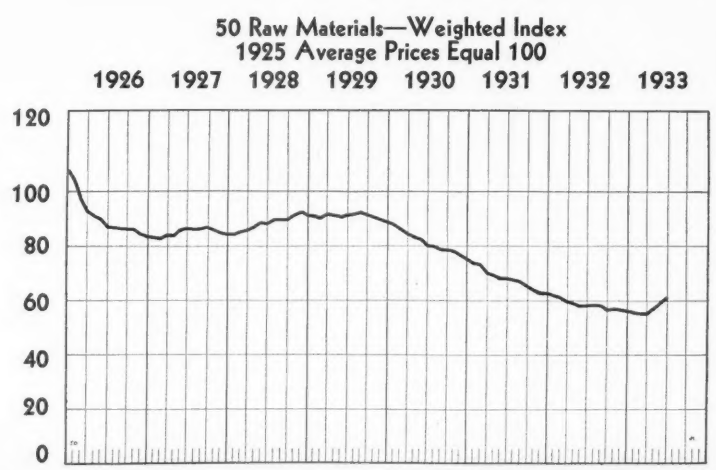
Iodine resublimed USP	25 lb. jar	$3.35 per lb.
Potassium Iodide USP	" " "	2.70 " "
Sodium Iodide USP ...	" " "	3.50 " "
Iodine tincture.....	45 gal. bbl.	3.75 " gal.
Ammonium Iodide....	25 lb. jar	4.25 " lb.
Iodoform USP Powd ..100	" keg	5.30 " "
Thymol Iodide USP... 25	" keg	4.30 " "

Menthol Trend Reversed

The rise in Japanese exchange has overshadowed the dull and competitive menthol market on spot and has resulted in a revision of the trend recently noted. Prices here have been marked up to the basis of $3.25 per pound in case lots and $3.45 per pound in less than case lots.

Replacement costs are now such as to make selling at lower than the above prices unwise. The statistical position in the primary market is also such that an improvement in the domestic consuming situation would put this item in a position where it would more nearly reflect the conditions abroad.

It is reported that the annual yields of peppermint in Chosen (korea) are increasing, the 1932 production having amounted to 2,581,470 pounds, as compared with 2,246,938 in 1931, and 1,418,-229 pounds in 1930.



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Consumer demand plus consumer satisfaction equals a steady stream of ever-increasing business for those who use perfume bases developed by Fritzsche Brothers . . . Fritzsche Brothers perfume bases are more than a Symbol of Quality —they are a guarantee of salability for the product because they stimulate consumer demand—and above all, deliver consumer satisfaction.

Perfume bases that impart perfectly blended odors for

SOAPS . . CREAMS . . EXTRACTS
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Halibut Oil In Norway

The Vitamin Institute at Oslo has made some preliminary feeding experiments and color tests with halibut liver oil, results of which are claimed to indicate a content of vitamin A 50 to 100 times greater than that of the average cod liver oil, and a content of vitamin D six to 10 times as great. Other Norwegian tests are said to have given similar results. The tests have not been extensive enough to determine the average potency and possible variations due to season, locality where fish are caught, and methods of preparation.

So far Norway has exported only small quantities of halibut livers, mostly for experimental purposes. Most of the halibut fishing is far from the coast, a greater part of it in Greenland and Iceland waters, so that livers have to be stored on ice or salted to keep them in fresh condition until they can be landed on shore. The demand for halibut livers has made itself apparent so recently that any comparative methods for storing the livers to maintain quality and potency of vitamin content have not been thoroughly tried out. Larger boats can easily be equipped to handle livers in any desirable manner.

The average catch of halibut by Norwegian fishermen, for the 10 year period 1920-1929 was 3,353 tons annually. Since then, the total has been somewhat higher, running between four and five thousand tons.

The halibut liver is relatively very small, its weight averaging only about two per cent of the whole fish. The fish itself often runs up to 100 kilos in weight. The amount of oil in the liver is also small as compared to that of the cod, averaging about 15 per cent or a little more in yield. If the average catch is taken as 4,000 tons, the maximum production of oil estimated would probably not exceed 12,000 to 15,000 kilos annually. The total export of medicinal cod liver oil at present is about 100,000 to 135,000 hectoliters. (Trade Commissioner Gudrun Carlson, Oslo).

Glycerin Holds Firm

Glycerin was very firm on spot but without open price change from 10¼c per pound which has prevailed for some time now. Leading factors, however, look for an advance. The imported material, which has been more or less of an unsettling factor in the New York market is now at a disadvantage due to the decline of the dollar as against foreign exchange. This foreign material has now about reached the level of the domestic glycerin. The tendency on the part of buyers is to contract and for a much longer period than usual and for longer than most sellers appear willing to commit themselves.

Cod Liver Oil Up

The strength that has been characteristic of the market for Norwegian cod liver oil for several months continues without abatement. The spot market price advanced several times during the past month and is now on the basis of from $28.00 to $30.00 per barrel as to seller and brand offered.

Strong undertones continued to prevail after the last price advance as the primary market continued high and strongly maintained especially in view of the advance in Norwegian exchange and the much reduced production this year. Norway reported that stocks of oil unsold was not large.

Unrevised statistics of exports of cod liver oil from Newfoundland indicate a decrease in shipments abroad to 3,815 Imperial gallons for the period from January 1 to May 26, 1933, from 4,065 gallons for the same period in 1932.

Refiners are preparing for the new fishery and it is understood that advance bookings have been made.

Arrangements have been made for the erection of a plant in Rekjavick for the freezing of steamed cod liver oil brought in by Icelandic steam trawlers, according to "Norges Utenrickshandel," June 1, 1933. The machinery has arrived at Reykjavick and the plant is expected to be in operation sometime this summer.

Exports of cod liver oil from Iceland increased in 1932 to 3,940,860 kilos from 3,110,850 kilos in 1931. Norway has been the principal destination of Iceland's cod liver oil shipments, although the United States has figured in the direct trade importing 143,100 pounds from Iceland in 1932 against 195,800 in 1931.

Aloin Cost Higher

Because of the increased cost to produce, sellers of aloin raised quotations to the basis of from 77c to 82c per pound. Demand is also said to have undergone some improvement which gave added strength to this item.

Exchange Advances Quinine

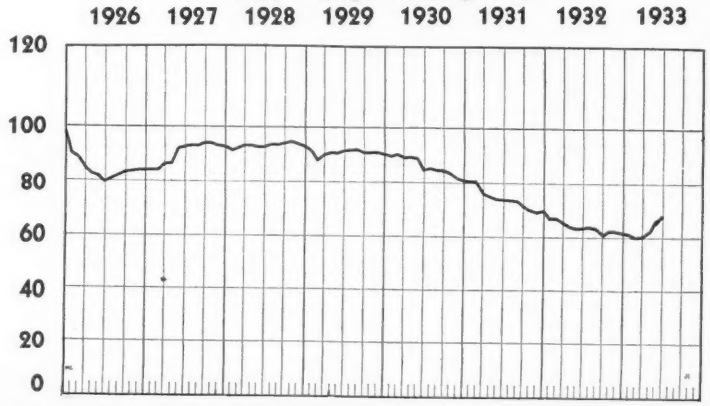
With guilder exchange reaching a new high in terms of the dollar, higher spot quotations were necessary on all quinine salts and other derivatives of cinchona bark. The general revised list of prices is quoted in our current price schedules.

The report of the Administration of the Madras Presidency for 1931-32 in commenting on the work of the Quinine Factory at Naduvattam states that production was again maintained at a low level due to the meager supply of cinchona bark available for quinine extraction. A quantity of 517,564 pounds of bark was worked. The output of quinine sulphate was 22,307 pounds and of cinchona febrifuge 9,084 pounds. The factory cost of production of quinine sulphate was Rs. 13-8-4 per pound. A trial consignment of "totaquina," a purified form of cinchona febrifuge, which has been sponsored by the Malarial Committee of the League of Nations, was made and distributed to various hospitals for trial. The financial accounts disclosed a profit on they ear's working of Rs. 22,790 an increase of Rs. 13,103 over the previous year's results.

An official decree known as the Crisis Ordinance for Cinchona cultivation was issued by the Governor General of Netherland India on May 9, 1933, with the purpose of guaranteeing the continuation of the work being done by private experimental stations on behalf of the estate cinchona cultivation in Netherland India.

The ordinance provides for the establishment of a committee which will operate under Government supervision. Export of estate cinchona will be allowed only under permit, such permits to be issued by the Committee. A small tax will be levied for these permits and the funds raised in this manner will be used for the maintenance of the existing private experimental stations devoted to cinchona cultivation. (Dept. of Commerce).

15 Medicinal Chemicals—Weighted Index
1925 Average Prices Equal 100



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by Exchange Lemon Products Company of Corona, California. Backed by the Sunkist group of 13,200 citrus growers—largest in the world. Immediate shipments from warehouse stocks in New York, Chicago, Philadelphia and St. Louis. For prices on kegs, barrels or carloads, consult any of the following distributors:

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St. Louis Philadelphia
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New Jersey

DODGE & OLCOTT COMPANY,
180 Varick Street,
New York City

NEW YORK QUININE & CHEMICAL WORKS
101 North 11th Street
Brooklyn, New York

SWANN CHEMICAL COMPANY, Birmingham, Alabama

THE HARSHAW CHEMICAL COMPANY, Cleveland, Ohio

PACIFIC COAST SERVED BY
Products Department CALIFORNIA FRUIT GROWERS EXCHANGE, Ontario, California

Morphine Salts Up

Leading factors contribute the sharp rise in narcotic prices to the closer control of the opium market by the monopoly. The following schedule now prevails:

Morphine Sulfate U. S. P.		
5 oz. can	$ 9.00	per oz.
1 oz. bottle	$ 9.10	" "
Morphine Ethyl Hydrochloride U. S. P.		
5 oz. can	$10.75	" "
1 oz. bottle	$10.82	" "
Morphine Hydrochloride U. S. P.		
5 oz. can	$ 9.00	" "
1 oz. bottle	$ 9.10	" "
Morphine Hydrobromide		
5 oz. can	$ 8.95	" "
1 oz. bottle	$ 9.02	" "
Morphine Acetate		
5 oz. bottle	$ 9.00	" "
1 oz. bottle	$ 9.07	" "
Morphine Alkaloid U. S. P. X		
5 oz. can	$11.10	" "
1 oz. bottle	$11.17	" "
If 10 ozs. 15c per oz. less		
Apomorphine Hydrochloride U. S. P.		
5 oz. can	$23.95	" "
If 10 ozs. 25c per oz. less		
If 25 ozs. 50c per oz. less		

The following schedule on codeine salts was put into effect as a result of the stronger position of raw material:

Codeine sulfate U. S. P.		
5 oz. can	$ 9.75	per oz.
1 oz. bottle	$ 9.82	" "
Codeine Phosphate U. S. P.		
5 oz. can	$ 9.25	" "
1 oz. bottle	$ 9.32	" "
Codeine Alkaloid U. S. P.		
5 oz. can	$11.95	" "
1 oz. bottle	$12.02	" "
Codeine Hydrochloride		
5 oz. can	$10.75	" "
1 oz. bottle	$10.82	" "
If 10 ozs. 15c per oz. less		

Cocaine Advanced Sharply

Cocaine was advanced sharply during the past month, being a reflection of the increased cost of production brought about by the strong raw material market. Alkaloid U. S. P. in 5 oz. cans was offered at $12.50 per oz. and in 1 oz. bottles $12.57 per oz. Hydrochloride U.S.P. ranged from $9.75 per oz. in 5 oz. cans to $9.82 per oz. in 1 oz. bottles.

The market is very strong at the advanced level with leading producers quoting for spot delivery only, being unwilling to write contracts.

Tartaric Acid Advanced

Domestic producers of tartaric acid advanced prices several times during the past month, the current market being on the basis of from 23c to 23½c per pound. Raw material was higher. The movement was also related to the steady rise in the cost of imported tartaric acid which consequently strengthened the domestic material.

Canadian imports of tartaric acid during the fiscal year ended March 31, 1933 showed sharp declines. The following table shows imports of this acid and the amount coming from the United States and the United Kingdom.

Fiscal year	*Total*	*United States*	*United Kingdom*
1931-32...lbs.	791,446 lbs.	118,780 lbs.	331,700
$	182,567 $	31,496 $	76,453
1932-33...lbs.	717,064 lbs.	7,805 lbs.	224,994
$	130,236 $	1,794 $	48,543

No Alcohol Contracts

Alcohol distillers are still quoting completely denatured number 5 on a spot basis only and it is still uncertain when contracts will be offered for next winter's supplies.

Demand for special formulae has been good and prices are on a firm basis in view of advancing grain prices and a firm molasses market. The producers looked forward to the coming months with every confidence.

Quotations for denatured alcohol to be delivered during the period July 1, to September 30, 1933 are as follows:

	Carloads drums	*Single drum price*
No. 0 spec	.335	.415
*No. 5 comp	.385	.465
23A spec	.37	.49
39B spec	.38	.50
40M spec	.34	.46

*So marked indicates for spot delivery only. Prices quoted are f.o.b. works.

Mercury Quoted Higher

With production of domestic mercury running far behind normal, the market continued to be dominated by the imported article. Prices on spot ranged higher at from $62.00 to $63.00 per flask. This was in line with the general trend of all imported raw materials.

This commodity was very strong after the advance, certain factors indicating that the market would probably go to $70.00 per flask in not a short while. At the $70.00 level domestic production would undoubtedly be stimulated with a probable reaction taking place, the price then being subject to fluctuation between its present level and the $70.00 high.

Mercurials Up Sharply

Mercurials advanced sharply during the past month. This development was long overdue and constantly expected due to the steady rise in the cost of quicksilver. Raw material sold not a long while ago at $47.00 per flask and is being quoted in the spot market today at $62.00. Prices at the new level are given in our schedule of current market prices.

Citric Acid Very Firm

The generally rising tendency of raw materials has not affected citric acid although this item is selling at the lowest figure in many years. Consumption is reported as fairly good and to have undergone some improvement.

Canadian imports of citric acid during the fiscal year ended March 31, 1933 showed sharp declines. The following table shows imports of this acid and the amount coming from the United Kingdom and the United States respectively.

	Total	*United Kingdom*	*United States*
1931-32.....lbs.	401,772	366,577	4,235
$	93,277	84,758	1,745
1932-33.....lbs.	403,867	306,903	14,306
$	83,722	66,147	4,762

Aspirin Output Higher

Trade in acetylsalicylic acid is holding up to satisfactory volume for this season of the year. Production in 1932 is reported at 2,291,000 pounds and sales at 2,229,000 pounds, valued at $1,506,000, or $0.676 per pound. This represents the production of acetylsalicylic acid, not aspirin tablets. It is an increase of 11 per cent in quantity of output over 1930, the last year reported, when 2,061,000 pounds were produced. Sales value per pound, however, dropped from 77c.

Thymol Quoted Higher

The long expected rise in the price of thymol was made during the past month. The steady rise in the cost to import was the reason, with the domestic producers following the market up.

Thymol U. S. P. was quoted in 25 pound tins at $1.45 per pound and iodide sold at $1.30.

Cream of Tartar Up

Following the recent advance in tartaric acid, leading domestic producers of cream of tartar put up the price to the basis of 16¾c per pound in barrels. The market was steady following the rise. The market for other tartar products were being closely watched in view of this development.

Bismuth Salts Advanced

With bismuth metal selling at the advanced level of 95c per pound, leading producers of salts have marked up the following items:

Bismuth subnitrate 25 lb. box....$1.25 per pound
Bismuth subcarbonate 25 lb. box..$1.45 per pound
Bismuth subgallate 25 lb. box.....$1.50 per pound

The usual differential for smaller quantities prevail.

Other salts remained without change but tending upward. A more active buying movement was noted.

Gum Arabic Moves Up

With a good spot demand leading support to the replacement situation, gum arabic was advanced to the basis of from 8c to 8¼c per pound for amber sorts. Other grades increased correspondingly with white number 1 at from 16c to 17c, seconds 14c to 15c and powdered gum at from 11c to 15c.

The added strength in the primary market, however, was the mainspring behind the advance. Sterling exchange advanced to new high levels. Holders of gum in the Sudan also seem to be taking advantage of their opportunity and are pushing their asking price beyond the differential in exchange rates. This development is certainly a logical one as gum arabic had reached the lowest levels ever known. The reaction toward higher prices is expected to continue.

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Benzaldehyde — Benzyl Chloride

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Acetyl Salicylic Acid
Methyl Salicylate — Minor Salicylates

Formaldehyde — Creosote
Para Formaldehyde — Creosote Carbonate
Hexamethylenetetramine — Guaiacol
Bromides — Silver Salts

Glycerophosphates
Calcium Guaiacol Sulphonate
Potassium Guaiacol Sulphonate

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Peppermint Oil Hectic

Peppermint oil was the feature of interest in a generally active essential oil market. This item can be characterized as excited as day to day price increases are noted. A late report indicates the spot quotations are on the basis of $3.25 per pound for natural oil and $3.65 for the redistilled. The sharpness of the increase in the cost of this material can be gauged by comparing the present price with the market in January when natural oil was selling at $1.85 and redistilled for $2.00.

The high spot market is due to conditions said to prevail in the producing centers. Reports early in the season indicated crop damage by frost and later by the drought that has been more or less prevalent throughout the Middlewest. There are, however, no actual reports as yet as to just how much oil will be obtained from the new peppermint crop. The 1932 production totaled 411,000 pounds with from 600,000 to 700,000 pounds being considered as normal.

Certain factors here are now inclined to take a bearish attitude on this market stating that the advance has been too rapid, and that Europe, particularly England, which annually takes a large percentage of this oil is not inclined to purchase in any sizable quantities although they have at this time the advantage of a low priced dollar. The market, however, is being watched closely for further developments.

Lemon Oil Higher

Lemon oil, both Italian and domestic, were advanced during the month. The currency situation was the strengthening factor in the Italian market. Importers, having to pay more for replacement, were forced to raise prices to the basis of from $1.00 to $1.25 per pound. The Californian oil held very firmly at the new and higher level of 75c per pound, being a reflection of the cooperative group to obtain a price level that would show a profit to the membership.

Orange Oils Advanced

All orange oils were up on spot, being lead by the sharp advance in the African grade. This product, which formerly sold at a low level, was put up to $1.10 per pound on the increased cost to import. Italian was $1.20 to $1.60, sweet West Indian $1.25 to $1.50 and the domestic oil 90c. The Californian oil would now seem to have the price advantage as it is the lowest in the group.

Oil Mace Up Slightly

Based on replacement costs the advance of oil mace to from $1.00 to $1.05 per pound was fully warranted. Demand is said to have improved materially lending support to the higher prices.

Camphor Oil Up

The anticipated advance in oil camphor was brought about, white oil being up to from 16c to 18c per pound. Quite active business and higher exchange in Japan was the contributary factor. In cans the range was from 18c to 20c per pound.

Cedarleaf Oil Firm

Demand for oil cedarleaf was not very good but with stocks on the small side the tendency was to advance along with the general list. From 70c to 75c per pound represents the market.

Oil Cassia Priced Higher

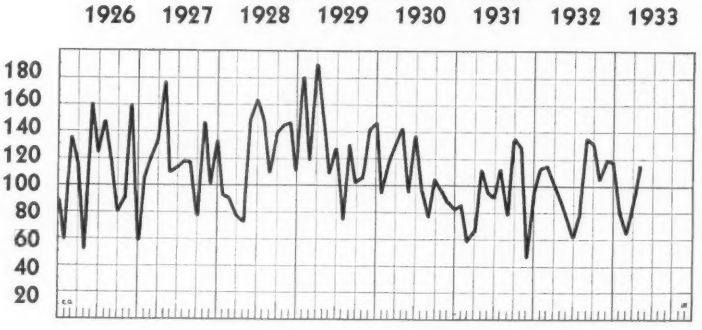
The increased replacement costs was added to the spot market price of oil cassia. Quotations ranged from $1.05 to $1.10 for redistilled oil. An increased demand, especially from soap manufacturers, was noted.

Eucalyptus Oil Strong

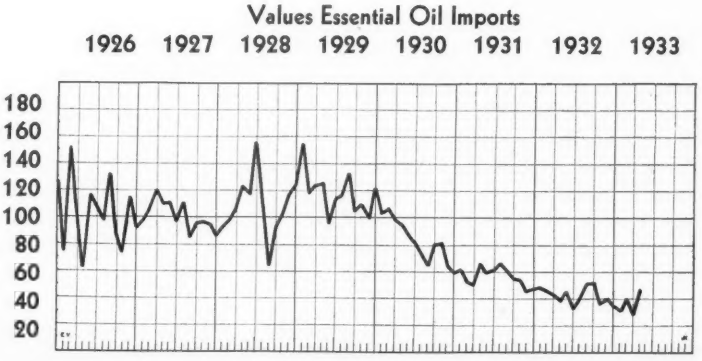
Advance in sterling exchange gave a much stronger aspect to the import market for eucalyptus oil. Spot quotations were not advanced further but the trend was in that direction.

15 Essential Oils—Weighted Index
1925 Average Prices Equal 100

Quantities Essential Oil Imports
1925 Monthly Average Equals 100
Adjusted for Seasonal Variation



Values Essential Oil Imports



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Benzoin Gum	Gum Tragacanth	Lavender Flowers
Chalk (Precipitated)	Henna	Olibanum
Chinese Shavings	Henasoap Shampoo	Orris Root
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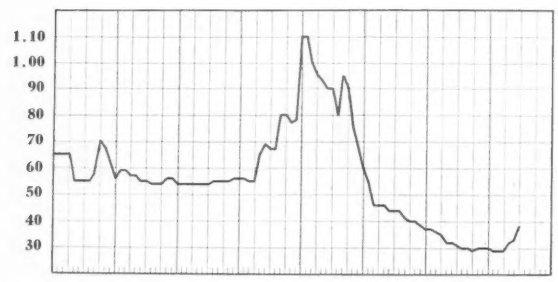
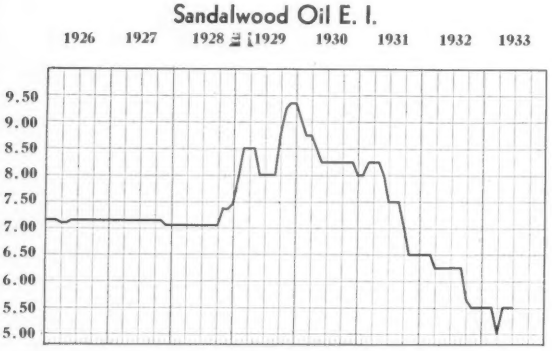
Essential Oil Price Charts

This month we show the price movements for the past eight years of the fifteen essential oils which make up our composite essential oil index shown on page 72. Additional charts on page 76.

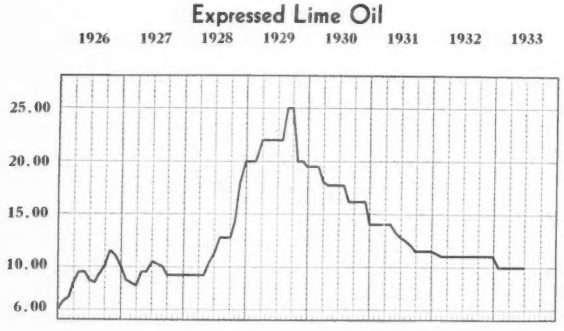
Anise Oil



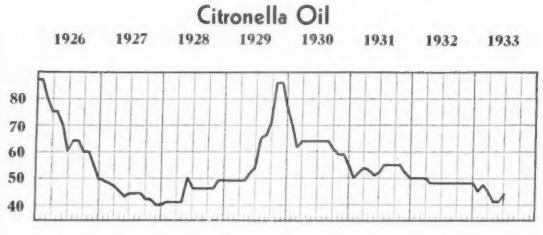
Sandalwood Oil E. I.



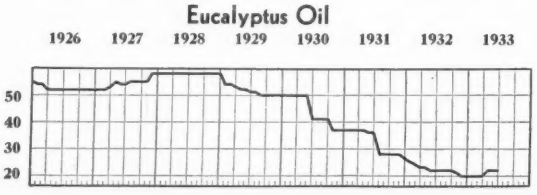
Expressed Lime Oil



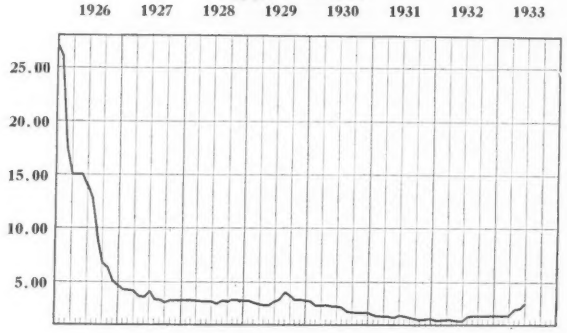
Citronella Oil



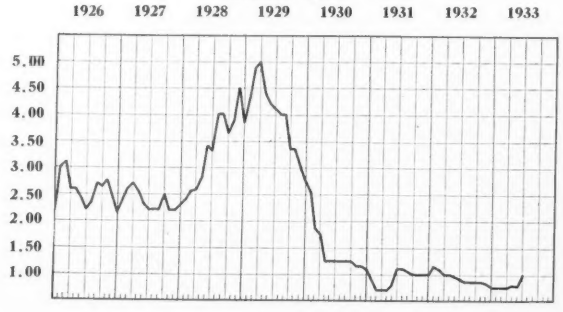
Eucalyptus Oil



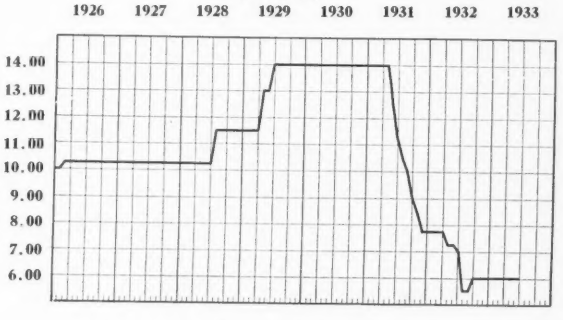
Peppermint Oil



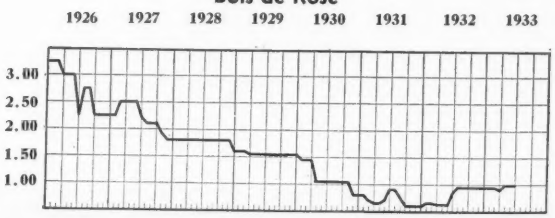
Lemon Oil



Rose Oil



Bois de Rose



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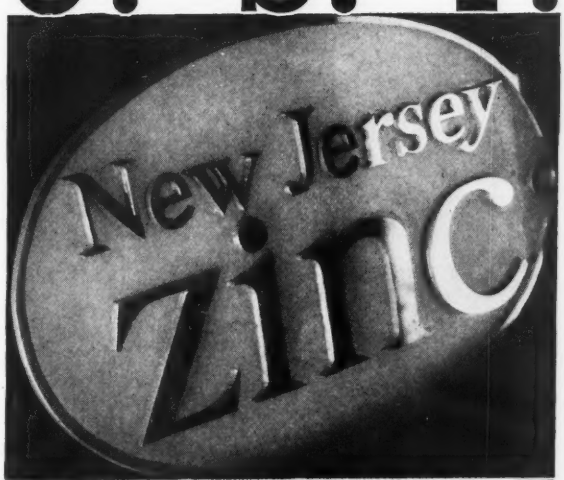

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Anise Oil Advanced

Continued advances in the replacement market resulted in higher spot prices for oil anise. A minimum of 40c per pound was quoted for U. S. P. oil with the range to 43c. Demand gained considerably on the rising market.

During the year 1932, anise oil in drums exported from Hong Kong amounted to 286,300 pounds valued at $58,200, of which the United States was the destination of 103,300 pounds valued at $20,200, with Germany taking a slightly greater amount. Shipments of the oil in cases totaled 136,300 pounds valued at $32,400, none of which was exported to the United States. Great Britain was the principal buyer.

Wormwood Oil Strong

New crop prospects for wormwood were fair but following the trend of all agricultural products the market took on a stronger tone during the trading of the past month. On spot from $2.70 to $3.20 was asked and the trend seemed to indicate still higher levels.

Anethol at $1.10

Strong raw material prices put up the price of anethol to a basis ranging from $1.00 to $1.10. Demand improved at the higher levels.

Citronella Moves Up

Spot citronella was higher, reflecting the strong primary position and the stimulated consumer request. The market here is said not to have fully reflected the sensational rise in sterling exchange. With a further movement of surplus supplies into consumption the trend to higher levels will undoubtedly be continued.

As reported by the Department of Commerce, Java shipped 332,796 kilos of citronella oil during the first quarter of 1933, an increase of nearly 48 per cent when compared with exports in the corresponding period of 1932.

Following is a table of exports of Java Citronella oil in tons of 1,000 kgs. net weight.

	1927	*1928*	*1929*	*1930*	*1931*	*1932*	*1933*
January...	107	104	68	57	74	63	107
February .	135	98	72	62	73	83	114
March....	100	81	107	63	69	72	103
April.....	90	114	82	79	72	91	110
May.....	90	184	121	63	78	70	111
June.....	132	109	43	48	73	76	88
Total Jan.-June	654	690	393	372	439	455	633

	1927	*1928*	*1929*	*1930*	*1931*	*1932*	*1933*
July.....	94	78	80	68	87	84	....
August ...	88	77	77	86	50	79	....
September	141	58	66	70	94	83	....
October....	96	91	55	68	77	86	....
November	122	77	41	70	60	92	....
December.	117	69	55	81	78	112	....
Total Jan.-Dec.	1312	1140	867	815	885	991	....

Geranium Oils Very Strong

The geranium oil group, it is said would bear watching in view of the fact that although import costs have been steadily advancing the spot market has not as yet reflected this development. Bourbon and African oil remain unchanged although the Turkish has already been advanced now being quoted at from $1.95 to $2.15 per pound.

Lemongrass Moves Up

Lemongrass was higher on spot being a reflection of the difficulty in effecting replacements. Primary market factors offered practically nothing during the past month and with exchange advancing the situation was suggestive of siill higher prices. From 70c to 73c was generally noted on the New York market.

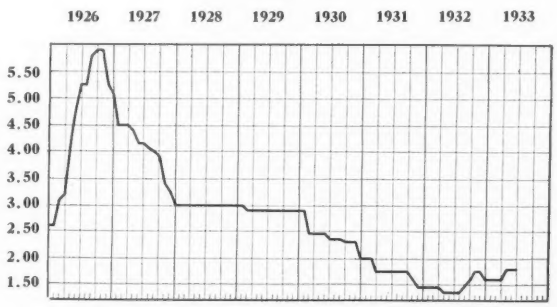
Copaiba Oil Up Slightly

Oil copaiba advanced 5c per pound in the spot market being a reflection of the increased cost of replacement. Quotations ranged from 55c to 60c per pound.

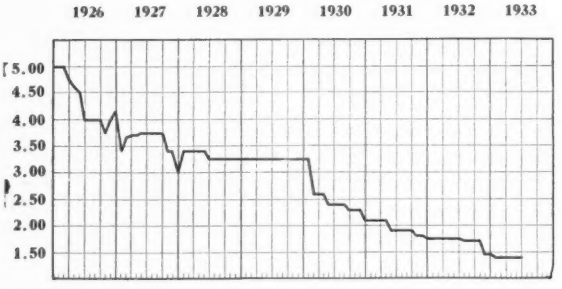
The State of Para exports the greater part of the Brazilian copaiba oil production which in favorable years has been estimated at between 200,000 and 300,000 pounds annually. The United States is a leading buyer of the oil taking 112,855 pounds worth $6,600 in 1932.

Bergamot Oil

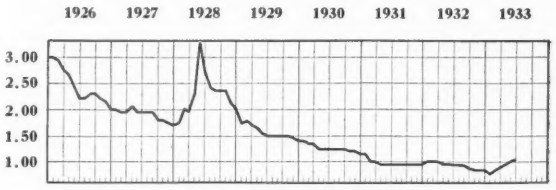
Cananga Oil



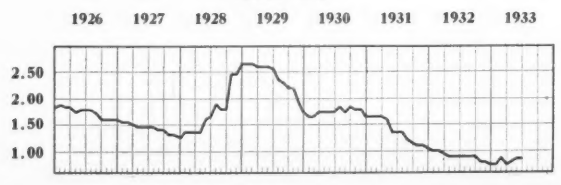
Lavender Oil



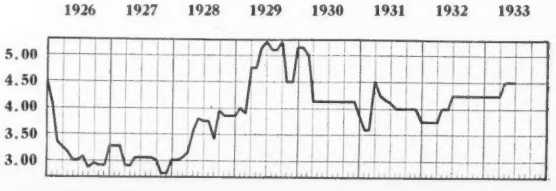
Cassia Oil



Clove Oil



Geranium Oil



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Bois de Rose Exports

From December 1932 to May 15, 1933, only six tons of genuine French Guiana rosewood oil were exported. The United States took four tons. The French Guiana Government now have all shipments analyzed before leaving Cayenne, and only the highest grade can be labelled French Guiana rosewood oil. Production is limited, since best rosewood is found only in abundance in certain parts of the interior of the Colony difficult of access. The distilleries have therefore to depend upon the natives to bring in the rosewood for sale to Cayenne.

Gum Benzoin Very Strong

Gum benzoin was very strong throughout the past trading period. Business was better and the rising cost of replacement kept the spot market well up to the recently established price range of from 20c to 22c per pound.

Spermaceti Points Higher

Spermaceti took a very firm position on spot owing to rising replacement costs forced on importers by advance in exchange. No further price changes were noted on spot but leading factors here took a stronger view of the entire situation.

Beeswax Looks Strong

The beeswax market was quite strong based on import costs. Bleachable waxes were still difficult to obtain. Refined yellow was up 1c to the basis of from 22c to 25c, yellow crude also selling higher at 17c to 21c.

Oil Nutmeg Higher

Due to higher replacement costs, oil nutmeg was forced up. From $1.05 to $1.10 was obtained for spot sales. Demand improved.

Tragacanth Up Sharply

Featuring the gum markets was a sharp rise in the price of tragacanth on spot. Number 1 gum is up to from 85c to 90c per pound, number 2 75c to 80c, number 3 65c to 70c, powdered 60c to 90c as to grade, and Turkish gum 50c to 70c.

The constantly rising exchange as against the United States dollar kept this item on the advance. A fair demand helped.

Ireland's Kelp Exports

The value of the kelp crop of the Irish Free State last year was £30,000, and carrageen to the value of £5,000 was also gathered, the quantities being 4,300 tons and 270 tons respectively. The price paid to the kelp gatherers averaged £7 17s. 4d. a ton.

Turtle Oil Production

Turtle oil is produced at Aldabra Island in the Seychelles Islands. One firm reports that it can produce about five tons per year, the quantity, however, depending upon the number of turtles killed for preparing Calipee. At present the killing of turtles has been reduced, because of the decline of the European market for Calipee. In the Seychelles Islands turtle oil is prepared in a rather primitive way, the fat being boiled down in an open pot and the oil extracted. The use of a steam jacketed pan, a more efficient method, has not been adopted because the price obtained for turtle oil has been so low as not to justify the expense of such an improvement. (Consul Leo J. Callanan, Nairobi).

Petitgrain Oil Strong

Petitgrain oil sales were made at from $1.00 to $1.15 per pound on spot and the market ruled very firm throughout the recent trading period. Advancing exchange rates raised the cost to import.

Bergamot Oil Steadier

Bergamot oil turned strong on the primary market during the recent trading period, but the presence of some weak material on spot tended to keep quotations unchanged. Demand was reported as moderate but showing signs of expansion.

Caraway Tending Upward

Spot caraway is strong and tending upward in sympathy with the shipment position. Factors abroad are taking a reserved position and not inclined to book business save at a still further rise in price. In the New York market the price ranged from $1.75 to $1.80 per pound.

Cloves Very Firm

The clove market was very firm after the recent advance, being a reflection of the steadily advancing cost of production and the expanding consumer demand. U. S. P. oil in cans was 85c to 90c per pound.

Vanilla Beans Up

Bourbon vanilla beans are higher as a result of increase in consumer demand and the recent rise in the franc. Quotations ranged from 80c to $1.25 per pound as to quality.

A small inquiry only prevailed for the Mexican beans. The price disparity between the two items is still so great that most consumers are confining their purchases to the Bourbon material.

Action has been taken by the Ministry of National Economy to increase exports of vanilla and to check imports of essences and essential oils, of which that flavoring is the base by encouraging the establishment of factories in this field near the production centers of the bean.

The Ministry reveals that these actions are being taken as the result of complaints from many vanilla planters that distributors fix prices, declaring that there is little demand for the product in Europe and elsewhere abroad, that make production unprofitable.

The Ministry is arranging to establish boards in the vanilla growing regions which will set quotations that are equitable for the planters, and to otherwise stimulate the export business with this commodity.

Spearmint Oil Up Again

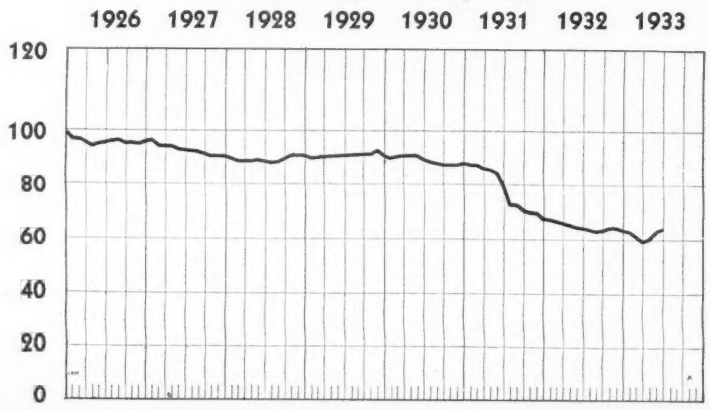
With the primary factors withdrawing offerings of oil spearmint, spot sellers have taken a very reserved view of the entire situation. Quotations were up again to the basis of from $1.45 to $1.65 per pound.

Drugs Detained

During the past month the following material was detained by The Food and Drug Administration at the Port of New York as being in violation of act governing product in question:

Poppy	672 bags	Caraway	10 lots
Stramonium	24 bags	Caraway	2950 bags
Gum Asafoetida	12 pkgs.	Celery	480 bags
Anise seed	25 bags	Dill	25 bags
Nux Vomica	134 bags	Mustard	364 bags
Colocynth Pulp	43 bales	Nutmegs	59 bags
Gum Guaiac	7 cases	Pepper (Black)	835 bags

25 Cosmetic Raw Materials—Unweighted Index
1925 Average Prices Equal 100



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Psyllium Advancing

More interest is centered in psyllium seed due to the rising tendency of the market. Latest sales of French black seed are reported at from 14c to 16c per pound as to quantity and quality being a substantial advance. This development followed the rising value of the French franc and also reports of very poor prospects for the new crop.

The very low prices that prevailed during the past year and the fact that about 1,000 tons of seed were carried over from the previous crop, resulted in a considerable reduction in plantings. Unofficial estimates place the new crop at not more than 2,000 tons, which would be some 50 per cent below 1932 production.

India seed also advanced in sympathy with the rise in sterling exchange, being quoted on spot at from 6c to 7c per pound. Buyers with an undersupply were inclined to cover at these levels.

Harvesting of the new crop of Greek psyllium seed is expected to get under way the early part of this month. Some seed has already arrived and is being offered at 19c per pound.

April imports of psyllium seed into the United States amounted to 545,500 pounds valued at $32,600 bringing the total for the first four months of 1933 to 2,169,400 pounds worth $117,400 compared with 1,853,700 pounds valued at $231,400 in the corresponding period of 1932.

Senna Less Active

The Sudan senna market during the first quarter of 1933 was less active than in the same period of 1932, the figures being 121 tons for 1933 and 296 tons for 1932.

While the United States was the destination of 215 tons during the first quarters of 1932, only 7 tons were recorded as going to the United States during the same period of 1933. In the 1933 quarter, 106 tons were shipped to the United Kingdom. (Department of Commerce.)

Asafoetida Firmer

Competition has practically been eliminated from the market for gum asafoetida. Demand has not been very active, the strength of the market resting on the import position. Cables received were higher with no tendency to accept bids. Spot quotations remained unchanged but tended higher.

Thyme Pointing Higher

Thyme was strong in undertone after the recent advance to from 9c to 9½c for the French material. This reflected fully the rise in foreign exchange. Stocks locally were also said to be smaller than usual.

Digitalis Priced Higher

Although the demand for digitalis leaves continues along routine lines, most factors are asking 28c per pound for this material. The advance was based almost entirely on the cost to replace.

Bayberry Wax Up

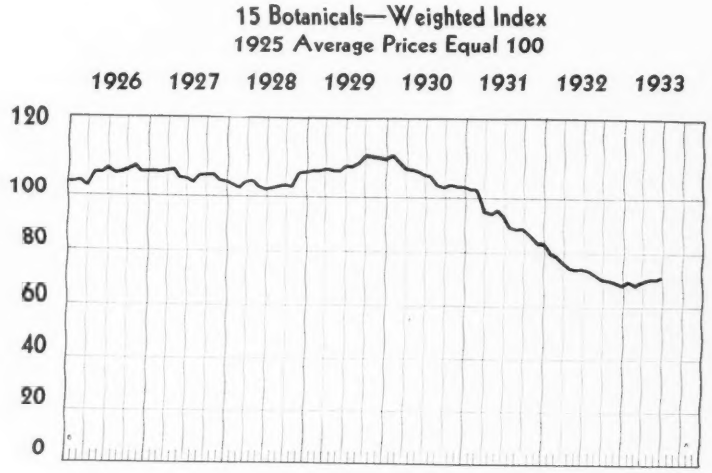
Owing to the generally stronger position of all waxes, bayberry was advanced 1c per pound now being offered at from 16c to 18c. As to demand, it remained quiet.

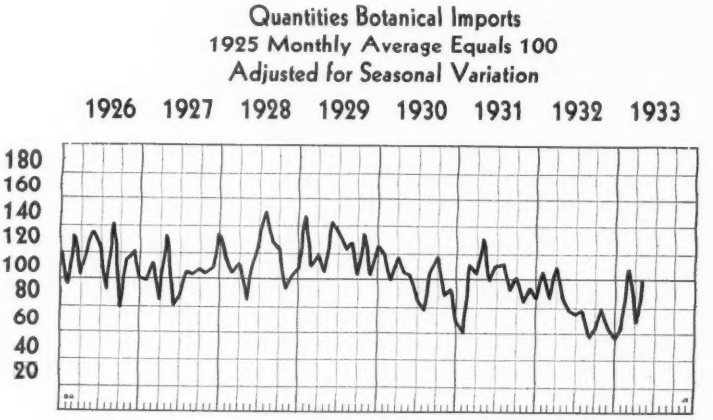
Chamomile Flowers Strong

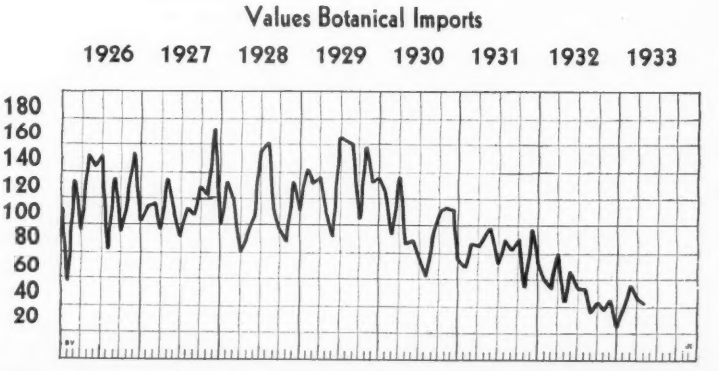
The chamomile market is firm in undertone and upward in price tendency. From 16c to 17c is generally asked. The replacement cost of this item has advanced and the market as a whole has been stimulated by the current movement to makers of certain toilet products.

Montan Wax Advanced

Crude montan wax was higher at from 7c to 8c under the influence of rising exchange. Business improved considerably.







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Pyrethrum Flowers Up Sharply

Pyrethrum flowers continued to advance on spot. Demand has been exceptionally heavy and exchange rates have favored higher prices. The statistical position in the Japanese market has also given strength to the general situation.

Although prices here ranged from 26c to 28c per pound, based on import costs the market should be 32c. There are, however, still some low sellers in the market which has kept prices from rising to their full value.

As regards the statistical position, Japanese production will not run over 5,200 tons as compared to a normal crop of 7,000 tons. The Dalmation crop is said to be about normal and will aggregate from 700 to 800 tons.

The Department of Commerce reports that the Fukuyama Conference estimates that the actual Japanese acreage planted in pyrethrum flowers this year will be 36,115 acres, the lowest figure since 1929, owing to adverse weather conditions on the Island of Hokkaido during the planting season. In 1932, the acreage was placed at 42,870.

It was reported that stocks on hand March 31, 1933, were the lowest in recent years for that date. The total carryover at that time was only 774 tons.

Exports of pyrethrum from Japan amounted to 1,806,300 pounds in the first quarter of 1933, compared with 3,851,000 pounds in the same period of 1932. But 80 per cent of the above shipments went to the United States.

Recent reports point to a continuous effort to propagate pyrethrum in Kenya, East Africa. About 200 settlers are said to be devoting a fairly large acreage to pyrethrum cultivation while the Kenya Government is assisting growers by providing tested seed from the Rothamsted Experiment Station. The plants cultivated in Kenya are said to produce a prolific crop of flowers.

Buchu Moving Up

With sterling exchange advancing to a new high, import cost on buchu leaves has tended steadily upward. The spot market advanced to from 20c to 22c for short leaves and it is said that only the lack of pressing demand prevented the market from rising fully in accordance with the cost to replace.

Hops Up Again

Hops were again higher on spot at from 80c to 90c per pound, domestic material. Imported continued to sell at about $1.08. It is reported that the foreign crop will be from three to four weeks late this year due to the prevalence of cold and rainy weather throughout central Europe.

Grains of Paradise Up

In order to cover the added cost to replace, local importers of grains of paradise have advanced prices 1c per pound and are now quoting from 9c to 10c. Also, most of the lower priced material on the market in the not far distant past, has already been sold into consuming channels.

Golden Seal Up Sharply

The upward movement in golden seal root has been extended. Whole root is sharply higher at from 75c to 80c per pound. Growers in the country seem to be in a better position and comparatively few offerings are made. It is pointed out that present prices are still considerably below normal as this item usually sold around $2.00 a pound.

Papain Crop Small

News from the production centers for papain would indicate that collections would be small. The tendency on spot was to advance prices all along the line. Pure powdered was therefore up to from $1.50 to $1.80 as to seller and quantity with the crude material offered at $1.45 per pound.

Spanish Saffron Firm

Although very little business is passing in Spanish saffron, the current high exchange rates has tended to keep the market in a very firm position. Eleven dollars per pound is a minimum price with the range to $11.50. Even a slight expansion in demand would put the market higher, it is generally agreed.

Gum Myrrh Up Slightly

Higher prices being warranted by the replacement situation, leading importers of gum myrrh advanced spot quotations 1c per pound to the basis of from 21c to 23c. Improved interest on the part of manufacturing consumers supported the market at the higher level.

Dandelion Strong on Exchange

Cost to import dandelion root was higher and the spot market, reflecting this condition, advanced 1c to the basis of from 12c to 13c per pound. The market gained strength steadily as at these levels the margin between replacement costs and spot prices was too close to allow a profit to sellers.

Clover Tops Crop Small

Advices from abroad would indicate that clover tops would be underproduced this season. A recent advance put the price up to from 14c to 16c per pound and it is generally felt that the tendency to higher levels will be extended.

Lycopodium Up

Lycopodium advanced on spot due to the fact that shipment quotations were higher than the market here. From 28c to 30c per pound is the market representing an advance of 6c. Sellers on spot were somewhat reserved and watched the replacement situation closely.

Belladonna Very Strong

Belladonna leaves is one of the numerous items in the botanical market that is feeling the effect of the stronger situation at the source of supply. Prices have not risen above 11c to 14c per pound but should consumer demand necessitate replacement an advance would be almost certain to take place.

Alkanet Root Higher

With much of the rather large surplus of stocks of alkanet root removed from the market by purchases for consumption during the past several months, the item has moved upward along with the general tendency of all botanicals. Spot quotations ranged from 11c to 13c per pound as to quantity taken.

Carnauba Wax Very Firm

Recent advances in carnauba wax have been well supported by domestic consumers. In view of the small stocks available here most importers are entertaining firmer ideas. Number 1 wax sold at from 29c to 30c per pound being up 1c during the past month.

Cubeb Berries Advanced

Advance in sterling exchange strengthened the market for cubeb berries. Whole XX quality ranged from 30c to 31c per pound and powdered material 32c to 33c per pound. With an improved demand the market undertones denoted a possible continuance of the advance.

Raspberries Very Strong

Although dried raspberries continued to sell at from 25c to 30c per pound and were without change during the past month, most factors, basing their views on replacement costs, look for a substantial rise in price for this item.

Sweet Orange Peel Up

Owing to a change in shipment price, sweet orange peel was higher on spot at from 7½c to 8c per pound. Bitter was unchanged.

Licorice Trade Greater

Iraw expanded its licorice root trade in 1932, having exported 17,830,000 pounds in the calendar year against 8,006,500 pounds in 1931.

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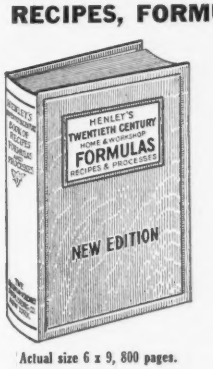

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Patents

BRITISH PATENTS

Benzoazine Pharmaceuticals

Process for manufacture of 4-aralkyl-3-keto-3:4-dihydro-1:4-venzoazines. Examples are given for making the 4-methylphenyl-, 4-ortho-chlorobenzyl and 4-beta-phenylethyl derivatives. F. Hoffmann La Roche & Co. A. G., Switzerland. B. P. No. 370,350, filed November 13, 1931.

Anti-Leprotic Drugs

Fatty acids recovered from seeds of Flacourtiaceae plants, are crystallized with ethyl alcohol. Mixture of crystalline acids is thereafter esterified. Alkyl, hydroalkyl, aralkyl or alkylhydroaryl esters may be prepared. Mixed ethyl esters may also be reduced to corresponding alcohols, which may then be acylated. Wellcome Foundation Ltd., London. B. P. No. 369,062, filed May 13, 1931.

Chlorine Pharmaceuticals

Therapeutically useful compounds are obtained by converting dialkylamino-alkylcarbamates or alkyl chloroformates into quaternary salts of type $X.NR_3CO_2$-RNR'_2. In this formula R represents alkyl and R′ alkylene radicals. Various examples are given, including quaternary salts from beta-diethylaminoethyl carbamate and methyl iodide, ethylene iodohydrin, betaiodoethylurethane and phenacyl bromide. E. Merck. B. P. No. 370,693, filed May 8, 1931.

Contrast Media for Radiography

Thorium dioxide sols, which may be used for radiographical diagnosis, are rendered insensitive to change of reaction by addition of colloidal or semi-colloidal carbohydrate, such as amylose or similar degradation products of starch. Stabile sols may be rendered neutral or alkaline and may be used especially for radiographical diagnosis, which consists in mere filling of hollow spaces and capillaries, such as bladder and kidneys. Into 100 parts of 12.5% thorium dioxide sol there are introduced 10 parts of an amylose prepared by digesting 10 parts of rice starch with 2.5 parts of oxalic acid and 50 parts of water in autoclave at 115 to 120° C. for 4 hours. Solution obtained is dialyzed and evaporated. To prepare sol of high concentration stable for all pH values, 20 parts of strongly degraded amylose are added to 100 parts of 25% solution of thorium dioxide. Amylose is prepared by treating 10 parts of wheat starch in 100 parts water with 3 parts 3% solution of diastase at 50° C. until thin liquid is produced. Chemische Fabrik von Heyden A.G., Dresden, Germany. B. P. No. 379,133, filed October 15, 1931.

Medicinal Preparations

Small quantity of caffeine may be added to addition product, which is formed quinine, quinidine and their salts and bile acids and their alkali metallic salts. Latter are added to counteract any detrimental heart action of alkaloidal medicinals. Thus for example quinine and dehydrochlolic acid are dissolved in hot toluene and phenylacetylene and evaporated. Trace of acridine is added, product is dissolved in water and solvent is distilled off. Small quantity of caffeine together with glucose is finally added and mixture is made into tablets. Addition of bile acids to alkaloids of therapeutic value is advantageous. Mention is made of taurocholic acid and lithocholic acid. F. W. R. Osten, London, England. B. P. No. 378,935, filed May 12, 1931.

Medicinal Preparations for Injection

Solutions of dyestuffs suitable for injection for therapeutic purposes, are manufactured by first making aqueous solution of salt of dyestuff of basic group and mixing therewith dyestuff sulfonic acid in presence of excess of basic dyestuffs sulfonic acid, which may be identical with or different from dyestuff sulfonic acid which is used for formation of salt. It is not necessary first to isolate usual salt and then to dissolve it in excess of dyestuff sulfonic acid, since basic dyestuff or its solution in water may be dissolved directly in excess of acid dyestuffs, or mixture of dyestuffs, which contain excess of acid constituent, may be dissolved in water. For example solution of trypan blue and 3:6-diamino-10-acridium chloride are mixed and resulting precipitate is dissolved in solution of trypan blue. Precipitate, obtained by mixing solutions of 3:6-diaminoacridine hydrochloride and trypan blue is dissolved in solution of trypan red. Precipitate obtained by mixing solution of trypan blue and methylene blue medicinal is dissolved in trypan blue. I.G. Frabenindustrie A.G., Frankfurt-am-Main, Germany. B. P. No. 379,650, filed April 15, 1932.

Synthetic Drugs

Mercaptopyridine carboxylic acids are converted into metallic (other than alkali or alkaline earth metals) compounds, which contain metal in mercapto group, by reducing action of metallic oxides, hydroxides or salts upon carboxylic acids or their alkali metal salts. Where neutral salt or alkali metal salt of acid is used, process is effected in presence of sufficient alkali to produce metallic hydroxides. Resulting salts may be precipitated from solution by organic solvents, for example alcohol or acetone, or solution may be acidified to give free acids. Acids may be converted into salts with alkali or organic bases, such as pyridine. For example lead-sodium and copper-sodium compounds of 2-amino-6-thiopyridine-2-carboxylic acid are mentioned as well as lead-potassium, lead-diethylamine, cadmium-potassium, vanadium-sodium, arsenic-potassium, copper-potassium, silver-sodium, tin-sodium, bismuth-ammonium, cadmium-choline, arsenic-pyridine, bismuthmethylanilin and gold-sodium compounds of 2:6-dithiopyridine-4-carboxylic acid. Lead compounds are useful in treatment of cancer. A. Rathmann, Charlottenburg, Berlin, Germany. B. P. No. 380,083, filed May 5, 1931.

Finely Distributed Mercury

Preparation in which mercury is present n finer state of subdivision than in gray powder is obtained by mixing mercury with wood charcoal in proportion of 9 parts of mercury, 3 parts of wood charcoal and 15 parts of precipitated calcium carbonate. Mixture is ground. Mercury is more readily comminuted in this form and agglomeration of particles when calcium carbonate is attacked by gastric juice is partly avoided. Kaolin may be used in place of chalk. G. Vittae. Bulletin de la Societe de Pharmacie de Bordeaux

X-Ray Contract Media

Silver salts of dialkyl esters of di-iodochelidamic acid are treated with alkyl, alkylene or aralkyl halogenides to give ortho-alkyl, ortho-alkylene or ortho-aralkyl derivatives, saponified to give alkaline salts which are valuable as X-ray contrast media. Silver salt obtained by action of silver nitrate on dimethyl ester of di-iodochelidamic acid, is treated with methyl iodide, ethyl iodide, propyl iodide, butyl iodide, benzyl iodide or allyl iodide to give corresponding ethers. This is followed by saponification resulting in formation of alkali salts. Schering-Kahlbaum A.G., Berlin, Germany. B. P. No. 381, 143, filed June 6, 1932.

Isoquinolin Dyes as Drugs

Alkoxy derivatives of 1-benzyl-isoquinolin are prepared by ring closure of alkoxy derivatives of phenyl-acetylphenyl-hydroxy-ethylamine, using phosphorus halide as condensing agent. Reaction may be effected with application of heat in presence of solvent. B. P. No. 380,847.

Barbituric Acid Derivatives

Stable derivatives of cyclohexenylethyl-barbituric acid are manufactured by converting it into its calcium, strontium or magnesium salts. For example, solution of acid in normal solution of sodium hydroxide is precipitated by addition of solution of calcium chloride, or strontium chloride or magnesium sulfate. I. G. Farbenindustrie A.G., Frankfurt-am-Main, Germany. B. P. No. 380,841, filed June 24, 1931.

GERMAN PATENTS

Thickener for Tooth Pastes

Aqueous or alcoholic solutions of pectin are used to thicken tooth pastes and mouth washes, both acid and neutral in reaction. Inasmuch as pectin reacts with alkaline substances, such as calcium carbonate, magnesium carbonate, soaps and like, neutral, inert bases, such as amorphous silica, silica gel, titanium dioxide, kieselguhr, alumna and the like, must be used in preparation of tooth pastes. Tooth pastes may also contain inorganic and organic acids, such as acetic acid, phosphoric acid, lactic acid, citric acid, tartaric acid, potassium acid tartrate and like. Enzymes, such as pepsin, in acid solution may also be added. Saponins or pure salts of diethylaminoethyl-oleylamide may be added when product which foams strongly is required. An example of such tooth paste calls for use of one part of gum tragacanth, five parts of pectin, 30 parts of glycerin or glycol, and 63 parts of water. mixture (36 parts) is worked into paste with 37 parts of titanium dioxide, 22 parts of pepsin, four parts of diethylaminoethyl-oleylamide lactate, four parts of glycerin and two parts of essential oil. Deutsche Pektingesellschaft m.b.H., Frankfurt-am-Main, Germany. G. P. No. 551,888, filed May 14, 1931.

Hair Dye

Hair dye consists of mixture of haematoxylin with diamines, with exception of paraphenylenediamine. Mixture may consist of 0.5 part of haematoxylin and 0.3 part of orthoaminophenol. Striking blonde shade is obtained thereby. Mixture which contains 0.5 part of haematoxylin and 0.3 part of para-aminodiphenylamine, gives deep black shade which does not turn greenish black. Mixture consisting of 0.5 part of haematoxylin and 0.5 part of para-aminophenol gives fine chestnut brown shade, while mixture of 0.5 part of haematoxylin and 0.5 part of metaphenylenediamine gives beautiful platinum blond shade. Ida Fehrmann. G. P. No. 541,404, filed June 14, 1927.

Vanillin

Splitting of safrol or isosafrol by means of alcoholic solution of alkali or alkali alcoholate yields not only alkoxymethyl derivatives of isoeugenol but also of isochavibetol. It has been impossible to separate these substances. It has been proven that sodium salts of these substances are differently soluble in water, alcohol and like, thus affording method for separation by salting-out, recrystallization or fractional crystallization. Isoeugenol derivative is difficultly soluble while isochavibetol derivative is easily soluble. J. D. Riedel-E. de Haen A. G., Berlin-Britz, Germany. G. P. No. 548,282, filed March 21, 1926.

Drugs from Kombucha

Nutrient solutions containing glucose or saccharose are acidified to definite degree of acidity by action of fungi. Solution is evaporated to syrup of good keeping qualities after acid content of solution have first been neutralized. Gluconic acid formed during biological oxidation of nutrient solutions containing glucose, is converted into calcium salt either during course of formation of acid or after it has first been formed. Solution is evaporated to stable syrupy mass. Acetic acid formed during biological oxidation of nutrient solutions containing saccharose, is removed by distillation with steam or air. Then gluconic acid is converted into calcium salt and solution evaporated to syrupy consistency. Siegwart Hermann & Pharmaceutische Werke Norgine A. G., Prague, Czechoslovakia. G. P. No. 538,028, filed February 20, 1927.

Suprarenal Hormones

Suprarenal glands are comminuted, dried and extracted with acetone, which may be mixed with ether under certain conditions. Oxidation must be avoided. Phosphatides are precipitated from extract and fatty acid compounds removed by saponification. Residual unsaponifiable matter is taken up with hot alcohol and portion not soluble is dissolved in ether or petroleum ether. Solution is evaporated to dryness and mass redissolved in solvent. This is repeated often enough to give pure hormone (A). Cholesterin residue precipitated from solution by dissolving unsaponifiable matter in hot alcohol. Alcoholic solution is evaporated to dryness and residue taken up in ether or light petroleum ether and subjected to distillation under high vacuum to yield hormone B. Suprarenal gland substance remaining after treatment with acetone or mixture of acetone and ether, is extracted with alcohol and extract evaporated to remove alcohol and then treated simultaneously with water and ether. Active principle is removed from aqueous portion by treatment with alcoholic solution of a lead salt. Lead precipitate, after separation from solution, is decomposed by acid in aqueous suspension and lead removed by filtration. Labophama Dr. Laboschin G.m.b.H., Berlin-Charlottenburg, Germany. G. P. No. 545,267, filed August 7, 1930.

Specifics Against Blood Parasites

Phosogene or thiophospgene or their derivatives are allowed to act on aromatic amino compounds, which contain one or more heterocyclic radicals. New compounds are recommended for treatment of various blood parasitic diseases. I. G. Farben industrie A. G., Frankfurt-am-Main, Germany. G. P. No. 546,143, filed December 6, 1928

Ergosterin from Yeast

Most of yeast is converted into water soluble compounds by enzymatic decomposition under sterile conditions. Liquefied mass is separated from undissolved residue without heating and then each of separated products is worked up separately to desired compounds. Process has advantage that ergosterin is strongly concentrated in insoluble portion. I. G. Farbenindustrie A. G., Frankfurt-am-Main, Germany. G. P. No. 520,853, filed January 3, 1928.

Colloidal Lecithin

Lecithin is mixed with same quantity of anhydrous glycerin. Glycerin contains about 2% of gelatin. Lecithin and glycerin combine when mixture is heated. Dr. Peter Gergell, Burg Stargard, Mecklenburg-Schwerin, Germany. G. P. No. 520,742, filed January 22, 1928.

New Hypnotic

This drug is ethyl-isopropyl-alpha-bromo-acetamide. It has decided advantage over normal propyl compounds as far as other groups are concerned in that hypnotic action of new drug is materially increased while its toxic properties are simultaneously reduced. Knoll A. G., Chemische Fabriken, Ludwigshafen-am-Rhein, Germany. G. P. No. 533,313, filed, July 28, 1926.

MISCELLANEOUS PATENTS

Basic Quinine Solution

Therapeutic solutions of basic quinine are obtained when quinine base is dissolved in solution of quinine salt and solvent assistant, like phenyldimethylpyrazolone, is added which aids quinine to remain in solution, even diluted. Chemische Pharmazeutische A.G. Bad Homburg, Germany. Austrian Patent No. 129,598, filed March 7, 1927.

Physiological Salt Solution

Cations of earth and alkaline earth metals are maintained in equilibrium in mixture so that surface tension of an electro-negative lipoid solution is not changed and best colloidal condition for the organic albumen in solution is obtained. For example, mixture, consists of cations sodium, potassium silver and calcium in numerical ratio of 40:2:1:1 and sodium atom compared with sum of remaining cations from ratio of 100 to 5 and 100 to 20, and especially about 100 to 10. A non-hygroscopic salt mixture consists of magnesium and calcium cations which are combined with organic acid, for example lactic acid. Nordmark Werke G.m.b.H. French Patent No. 731,991, filed December 9, 1931.

Section of Stock Room
New York Quinine and
Chemical Works Plant

Manufacturers of

Bismuth Subcarbonate
Bismuth Subgallate
Bismuth Subnitrate
and other Bismuth Salts
Brucine Alkaloid
Brucine Sulphate
All Salts of Cinchona Bark
Codeine Alkaloid
Codeine Phosphate
Codeine Sulphate
Iodine Resublimed
Iodoform
Menthol-Y
Morphine Alkaloid
Morphine Sulphate
Opium Gum *(Gran. and Powd.)*
Potassium Iodide *(Cryst.-Gran.-Powd.)*
Quinine Sulphate and other Quinine Salts
Strychnine Alkaloid
Strychnine Sulphate
Thymol Iodide

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Prices Current

Medicinal, Aromatic, and Photographic Chemicals, Crude Drugs, Spices, Essential Oils and Concentrates, Miscellaneous Raw Materials, etc.

Chemical prices quoted are of American manufacturers, spot New York, f. o. b. for immediate shipment, unless otherwise specified.

Products sold f. o. b. works are so specified. Imported chemicals are so designated. Resale stocks, when a market factor, are indicated "second hand."

Crude Drugs and Essential Oils are quoted f. o. b. New York (Manhattan with limitations) for immediate shipment

The range of price given is not "bid and asked," but are prices of different sellers, based on varying grades and/or quantities. Containers named are original packages most commonly sold.

Acetanilid
Iodide

Chemicals

Acetanilid, USP, 200 lb bbls..lb	.26	.27
Acetone, pure 350 lb drs wks..	.10	.11
Acetphenetidin, 225 lb bbls..lb.	1.20	1.25
ACID, Acetylsalicylic, 225 lb bbls.	.70	.75
Agaric, 1 oz vials.....oz	...	3.50
Arsenous, USP, 220 lb bbls lb.	...	.18
Benzoic, USP, 100 lb bbls.lb.	.48	.52
Boric, 300 lb bbls.....lb.	.07	.08
Cacodylic, 5 lb. bot.....lb.	...	8.00
Camphoric, USP, VIII 1 lb bot.....lb.	4.82	4.82
Carbolic, USP, crys 112 lb tins.....lb.	.17	.18
Cinnamic, 5 lb cans.....lb.	2.85	3.25
Citric, USP, crys 230 lb bbl lb	...	.29
USP, crys imp. 112 lb keg .....lb.	.34	.36
USP, powd 200 lb bbl...lb.	...	.31½
Gallic, USP, 150 lb bbls..lb.	...	.74
Glycerophosphoric, 25% 1 lb bot.....lb.	1.40	1.75
Hydriodic, USP, 10% 5 lb bot.....lb.	...	.59
Hydrobromic, USP, 40% 155 lb. cbys.....lb.	...	.55
Hypophosphorous, USP, 30% 5 gal demis.....lb.	...	.75
Lactic, USP, VIII 100 lb cbys lb.	.53	.55
USP, X 100 lb cbys.....lb.	.55	.57
Phosphoric, USP, Syr 70 lb drs.....lb.	.14	.15
Pyrogallic, crys 5 lb cans..lb.	1.30	1.40
Resublimed, 5 lb cans...lb.	1.60	1.70
Salicylic, USP, 100 lb bbls.lb.	.40	.45
Stearic, double pressed, bags .....lb.	.08½	.09
Triple pressed, bags.....lb.	.11¼	.12½
Succinic, 100 lb bbls.....lb.	...	1.35
Sulfurous, USP, 6% 100 lb cbys.....lb.	.05	.06
Tannic, USP, fluffy 50 lb bbls. .....lb.	.80	.83
Powd 200 lb bbls.....lb.	.70	.75
Tartaric, USP, 300 lb bbls.lb	.23	.23½
Aconitine, Alk, crys 1 oz vials .....oz.	...	29.00
Amorphous, 1 oz vials....oz.	...	17.00
Agaricin, 1 oz vis incl.....oz.	...	2.32
ALCOHOL, Benzyl, 5 lb bot lb. F. O. B. Works.....	1.20	1.35
Ethyl, USP, 190 pf 54 gal drs.....gal.	...	2.535
Grain U. S. P. bbls....gal.	...	2.565
Pure tax free drums...gal.		
Ethyl.....	...	.445
Grain.....	...	.475
Denatured, (drums included) add 5c for bbls.		
No. 1 spec.....gal.	.335	.415
No. 5 comp.....gal.	.385	.465
23 a, spec.....gal.	.37	.49
39 b, spec.....gal.	.38	.50
40 m. spec .....gal.	.34	.46
Isopropyl refd 98-99% drs. incl.....gal.	.55	.60
Phenylethyl, 1 lb bot.....lb.	4.30	4.50
Aloin, USP, 100 lb cases....lb.	.77	.82
Aluminum Acetotartrate kegs .....lb.	...	1.60
Amidipyrine, 10 lb boxes....lb.	4.00	4.10
AMMONIUM, Acetate 100 lb kegs.....lb.	.26	.33
Benzoate, USP, 1 lb bot...lb.	...	1.27
Borate, 10 lb bot.....lb.	...	.35
Bromide, USP, 450 lb bbls.lb.	.35	.36
Carb, USP, lump 150 lb kegs .....lb.	...	.11
USP, powd 150 lb kegs..lb.	...	.12
Citrate, 100 lb kegs.....lb.	.90	1.30
Ichthyolate, as to brand..lb.	4.00	4.50
Iodide, USP, 25 lb jars...lb.	...	4.25
Phosphate, dibasic 250 lb bbls .....lb.	.48	.50
Salicylate, USP, 100 lb kegs .....lb.	1.15	1.20
Valerate, USP, 25 lb jars...lb.	2.75	2.90
Amylene Hydrate, 1 lb bot..lb.	...	7.10
Antipyrine, USP, 100 lb cans.lb.	2.00	2.50
Apomorphine Hydrochloride, ¼ oz. vials.....oz.	24.60	22.70
Arecoline Hydrobrom, 1 oz vials .....oz.	4.25	4.50
Aspidospermine Amorphous..oz.	...	15.00
Atropine Alk, USP, 1 oz. vials oz.	5.25	5.50
Methyl bromide, 1 oz vials.oz.	...	25.00
Sulfate, 5 oz cans.....oz.	...	2.50
Single ounce.....oz.	...	3.00
Barbital, 1 lb. bot.....lb.	3.75	3.85
Barium Iodide, 5 lb box.....lb.	...	4.35
Sulfate, X-ray diagn bbls..lb.	.09½	.10
BAY RUM Porto Rico, 45 gal. bbls.....gal.	.75	.80
Domestic syn. 50 gal bbl..gal.	.70	.75
St. Thomas, 50 gal bbls...gal.	.80	.90
Benzocaine 25 lb. lots..... 1 lb.l ots.....lb.	5.00	5.75
Benzonaphthol, 5 lb boxes...lb.	2.50	2.60
Benzoyl Cholride, 500 lb dr..lb.	1.00	1.05
Benzyl Benzoate, Medicinal FFC.....lb.	1.20	1.40
Chloride Redis, 160 lb cby.lb.	.30	.35
Formate, 1 lb bot.....lb.	3.25	3.50
Succinate, 160 lb cby.....lb.	...	5.25
BISMUTH, metal 100 lb cases .....lb.	...	.95
Ammon. Citrate, USP, 5 lb cans.....lb.	...	3.10
Betanaphtholate, 5 lb box.lb.	...	2.90
Citrate, USP, 5 lb cans....lb.	...	2.45
Chloride.....lb.	...	2.35
Hydroxide.....lb.	...	2.65
Nitrate, 25 lb jars.....lb.	...	.95
Oxide anhydrous.....lb.	...	3.05
Oxychloride, 25 lb boxes...lb.	...	2.60
Salicylate, 25 lb boxes.....lb.	...	1.55
Subcarbonate, USP, 25 lb boxes.....lb.	1.45	1.58
Subcarbonate, X-ray diag 1 lb. bot.....lb.	2.20	2.27
Subgallate, USP, 25 lb boxes .....lb.	1.50	1.63
Subiodide, 5 lb lots.....lb.	...	3.40
Subnitrate, USP, 25 lb jar.lb.	1.25	1.38
Subsalicylate, USP, 25 lb boxes.....lb.	2.15	2.20
Tannate.....lb.	...	2.15
Borax, crys USP, 400 lb bbls.lb.	...	.04½
Bromoform, USP, 5 lb bot cases .....lb.	1.65	1.90
Butylchloral Hydrate bot....lb.	4.00	5.00
Cadmium iodide, 10 lb bot...lb.	...	3.65
CAFFEINE Alk, USP, 1..... 100 lb kegs.....lb.	1.95	2.00
Citrated, 50 lb cans.....lb	1.55	1.60
Hydrobromide, 1 lb bot...lb.	4.80	5.00
Hydrochloride, 1 lb bot...lb	6.05	6.55
Sulfate, 1 lb bot.....lb.	5.40	5.90
Sodium Benzoate, tins....lb.	...	3.05
Salicylate, tins.....lb.	...	2.95
Calcium Bromide, 100 lb cs..lb.	...	.60
Carb, USP, 175 lb bbls....lb.	.05	.06
Gluconate, Gran. 125 lb..... bbls.....lb.	.47	.52
Powd.....lb.	.47	.52
Glycerophos, 250 lb bbls...lb.	...	1.05
Hypophos, USP, 25 lb cans lb.	.55	.60
Iodide, 5 lb bot.....lb.	...	3.75
Lactate, USP, 500 lb bbls lb.	.35	.40
Lactophosphate Soluble...lb.	...	1.20
Powdered tins.....lb	...	1.00
Insol, powd tins.....lb.	...	.50
Phosphate & Sulfate Tooth Paste grade, Works..lbs.	.03	.06
Sulfide, USP, 100 lb drs...lb.	.21½	.24
CAMPHOR, Jap. ref. slabs 100 lb. cases.....lb.	.47	.48
Refined powd.....lb.	.48	.49
½ oz tab, 100 lb cases....lb.	.55	.56
Liniment, bbls.....gal.	2.10	2.20
Monobrom, 100 lb cases...lb.	1.60	1.65
Casein edible, 100 lb kegs...lb.	.45	.55
Charcoal Animal medicinal jars incl.....lb.	...	.50
Charcoal Wood, powd, 100 lb. bbls.....lb.	.06	.07
Chloral Hydrate, USP, 25 lb jars.....lb.	.75	.77
100 lb drums.....lb.	.70	.75
Cholesterin.....lb.	11.00	17.00
Chloroform, USP, 50 lb drs...lb.	.25	.27
Chlorophyll, 1 lb. bot.....lb.	3.75	4.00
Chromium Sulfate Scales, tins .....lb.	.45	.50
Powdered tins.....lb.	.50	.55
Chrysarobin, 50 lb tins.....lb.	2.50	2.55
Cinchonine Alk, 100 oz tins.oz. Crystal.....oz.	.42	.44
Sulfate, 100 oz tins.....oz.	.26	.28
Cinchonidine Sulfate, 100 oz tins .....oz.	.36	.38
Cinchophen, U.S.P. kegs...lb.	2.75	3.25
Cocaine Alk, USP, 1 oz vial..oz.	...	12.57
Hydrochloride, USP.....oz.	...	9.82
CODEINE Alk, 1 oz vials, 10 lots.....oz.	...	11.87
Hydrobromide.....oz.	...	8.92
Hydrochloride.....oz.	...	10.67
Nitrate, oz vl 10 oz lots....oz.	...	9.80
Phosp. oz vl, 10 oz lots....oz.	...	9.17
Salicylate.....oz.	...	8.25
Sulfate, oz vl, 10 oz lots...oz.	...	9.67
Colchicine Alk, USP, 1 oz vl.oz.	...	22.00
Salicylate, 1 oz vls.....oz.	...	35.50
Cream Tartar, USP, 300 lb bbls .....lb.	.16¾	.17¼
Imp. powd. 224 lb bbls....lb.	.17½	.17¾
Creosote, USP, 42 lb cbys....lb.	.45	.47
Carbonate, 150 lb.....lb.	1.40	1.75
Cresol, USP, 400 lb drums...lb.	...	.18
500 lb drums.....lb.	.12	.15
DIGITALIN Pure, 1 oz vial.oz	15.00	15.50
Dover's Powder, USP, 5 lb tin .....lb.	2.75	2.80
Duboisine Sulfate, 1 oz vl....oz.	35.00	40.00
Emetine Alk, 15 gr vial.....oz.	...	.85
Hydrochloride, USP, 1 oz vl .....oz.	12.00	12.25
15 grain vials.....oz.	2.50	2.70
Ephedrine, alk. 25 oz. tins,..oz.	1.50	1.90
Hydrochloride, 25 oz. tins, oz.	1.30	1.65
Sulfate, 25 oz. tins.....oz.	1.30	1.65
Epsom Salts, USP, 200 lb bbls .....100 lb.	2.25	2.50
Imp. 100 lb bbls.....100 lb.	2.30	2.35
Ergotin Bonjean, 1 lb jars...lb.	18.50	19.00
Eserine Alk, 1 oz vials.....oz	...	50.00
Salicylate, 1 oz vials.....oz.	...	40.00
Sulfate, USP, VIII 1 oz vials .....oz.	...	40.00
ETHER, USP, 55 lb drums..lb.	...	.11
Anaesthesia, 55 lb drums..lb.	.21	.23
Nitrous, 1 lb bot.....lb.	.75	.77
Ethyl Chloride, 200 lb bot...lb.	.22	.24
Ethyl Iodide, 5 lb bot...lb.	6.00	6.05
Formaldehyde, USP, 100 lb cbys lc-l wks.....lb.	.07	.07¼
Gall Extract.....lb.	.20	.21
GLANDULAR SUBSTANCES 1 lb. lots		
Duodenal Substance.....	...	3.75
Liver Extract 1-20	...	5.75
Orchic Substance (Testicular)	...	3.75
Ovarian Substance, whole ..	...	12.50
Ovarian Residue	...	10.00
Pituitary Substance, whole ..	...	45.00
Pituitary Substance, Anterior Lobe	...	40.00
Thyroid, U. S. P.....	...	3.75
Oxgall Powder.....	...	1.25
GLYCERIN, CP, 550 lb drums .....lb.	...	.10½
Gold Chloride, bottles.....oz.	12.00	12.50
Guaiacol, liq. USP. 100 lb cbys.....lb	1.60	1.70
Crystals.....lb	2.25	2.50
Benzoate, 1 lb bottles.....lb.	...	3.00
Carbonate, 5 lb boxes.....lb.	1.75	1.80
Halazone, 5 lb bot.....lb.	2.75	3.25
Hexamethylenetetramine, USP, 100 lb dr.....lb.	.46	.47
Homatropine Hydrobrom USP. .....oz.	...	14.50
5 oz and 1 oz vials....oz.	...	13.50
Hydrastine Alk, USP, 1 oz vial .....oz.	20.50	21.00
Hydrochlide, USP, 1 oz vials .....oz.	20.50	21.00
Sulfate, 1 oz vial.....oz.		
Hydrastinine Hydrochloride, USP, 15 gr vials.....oz.	22.50	23.00
Hydrogen Peroxide, USP, soln 375 lb bbls.....lb.	...	40.00
Hyoscine Hydrobrom, USP, 1 oz vials.....oz.	.03½	.04½
5 oz, 1 oz vials.....oz.	13.07	35.00 13.57
Hyoscyamine Alk, crystals, 1 oz vials.....oz.	...	25.07
Amorphous, 1 oz vial...oz.	...	75.07
Hydrobromide, USP. 1 oz vial .....oz.	...	25.00
Sulfate, 1 oz vial.....oz.	...	25.07
Hypoquinone, 100 lb kegs...lb.	...	1.10
ICHTHYOL, tins.....lb.	4.00	4.25
Iodide Arsenous, 5 lb bot...lb.	...	5.20

Chemicals

Arsenous-Mercuric soln, 5 lb bot	lb	.26
Iodine, crude, 200 lb kegs	lb	25s per kilo
Resublimed, 25 lb jars	lb	3.35
Tincture bbls	gal	3.75
Iodoform, powd 10 lb bot	lb	5.30
Iron & Ammonium Citrate, USP, 50 lb cans	lb	.42 .44
Chloride, USP, lump 400 lb bbls	lb	.06 .08
Citrate, USP, VIII 25 lb can	lb	.94 .99
Hypophosphite, 5 lb cans	lb	1.40 1.50
Iodide, 1 lb bottles	lb	3.00
Phosphate, USP, 50 lb cans	lb	.69
& Potas Oxalate, 250 lb bbl	lb	.45
Pyrophosphate, USP, 50 lb	lb	.74 .80
& Sod Oxalate, 50 lb cans	lb	.30½
Sulfate, USP, crys bbls	lb	.04 .04½
Ferrous dried bbls	lb	.08
Valerate, tins	lb	2.75 3.00
Jalap Resin, USP lumps, 5 lb tins	lb	4.00
Powdered, tins	lb	4.65
Lanolin, hyd 350 lb. bbls	lb	.13 .15
Anhydrous, 350 lb. bbls	lb	.14 .16
Lead Acetate, USP, 100 lb kegs	lb	.16½ .19½
Iodide, USP, VIII 5 lb bot	lb	2.55
Lecithin, 5 oz. jars	oz	1.00 1.30
Vegetable, cans	lb	1.00 2.50
Licorice Ext Mass, cases	lb	.19 .20
Compound powder, bbls	lb	.11 .13
LITHIUM CARBONATE, 250 lb bbls	lb	1.25 1.35
Citrate, USP, 100 lb kegs	lb	1.40
Iodide, 5 lb bottles	lb	4.60
Lobeline Sulfate, ¼ oz vial	oz	8.75
Magnesium Carbonate, USP, 100 lb bbls	lb	.08 .09
English, oz blocks	oz	.16 .18
Glycerophosphate, 5 lb tins	lb	3.20 3.25
Hypophosphite, 5 lb cans	lb	1.10 1.15
Oxide, 100 lb. cases	lb	.35 .45
Salicylate, 100 lb kegs	lb	1.10
Stearate, bbls	lb	.18 .20
Manganese Glycerophosphate, 5 lb tins	lb	2.90 3.00
Hypophosphite, USP, VIII 5 lb cans	lb	1.35 1.40
Iodide, 1 lb bottles	lb	5.35
MENTHOL, USP, 60 lb cases	lb	3.25 3.45
Synthetic, cases	lb	2.50 2.90
Mercury Metal, 75 lb flasks	fl	62.00 63.00
Bichloride, crys 25 lb box	lb	.92
Gran powd, 100 lb kegs	lb	.77
Bisulfate, 25 lb boxes	lb	1.48
Blue Mass, 25 lb boxes	lb	.84
Powd, 25 lb boxes	lb	.85
Blue Ointment, USP, 50%, 25 lb cans	lb	.99
Mild 30%, 25 lb cans	lb	.69
33 1/3% mercury	lb	.72
Calomel, 50 lb boxes	lb	1.23
English	lb	2.65 2.75
Iodide, green, 25 lb jars	lb	3.95
Red, USP, 25 lb jars	lb	4.00
Yellow, USP, VIII, 25 lb jars	lb	4.10
Red precip Powd. USP, 25 lb boxes	lb	1.34
White precip, Powd., USP, 25 lb. boxes	lb	1.41
Salicylate, 25 lb bot	lb	2.32
With chalk, USP, 25 lb boxes	lb	.69
Methanol, Pure 1c-1 drs	gal	.44
Methyl Salicylate, USP, 50 lb cans	lb	.40 .42
Methylene Blue, USP, med 5 lb cans	lb	2.00 2.05
Milk powd. 150 lb bbls	lb	.09 .12
MORPHINE Alk, 5 oz tin	oz	11.10 11.17
Acetate, 5 oz tins	oz	9.00 9.07
Hydrobromide, 5 oz tins, 10 oz lots	oz	8.80 9.02
Hydrochloride, 5 oz tins, 10 oz lots	oz	8.85 9.10
Ethyl Hydrochloride, 5 oz tins 10 oz lots	oz	10.60 10.82
Sulfate, 5 oz tins, 10 oz lots oz.		8.85 9.10
Naphthalene Flake, 175 lb bbls wks	lb	.04½ .05
Balls, 250 lb bbls wks	lb	.05½ .06
Neo-cinchophen 5 lb. lots	lb	15.00 18.00
Oxgall, Purified, 5 lb bot	lb	2.00 2.50
USP Extract, 5 lb. bot	lb	1.80 1.90
Oxyquinoline Sulfate, tins	lb	5.00 5.75
Pancreatin, USP, 100 lb	lb	1.90
Paraffin, refd, 200 lb cs slabs 118 -120 deg MP	lb	.08 .09
128-132 deg MP	lb	.07½ .07¾
Para-Aldehyde, USP, 100 lb carboys	lb	.48 .50
Pepsin, USP, 100 lbs. 1:3000	lb	2.25
100 lbs. 1:6000	lb	4.00
100 lbs. 1:10000	lb	6.50
Peptone, powd., or granular 5 lb. 100 lb. lots	lb	.70 1.00
PHENOBARBITAL, U. S. P., 100 lb. lots	lb	6.50
Phenolphthalein, U. S. P.		
100 lb drums	lb	.52
5 lb cans 100 lb lots	lb	.60
Yellow		.47
Pilocarpine Hydrochloride, USP, 1 oz vials 25 oz lots	oz	3.25
Nitrate, 25 oz lots	oz	3.25
Single ounce	oz	3.50
Alkaloid, 15 gr vials	vl	.75
Piperadine, 25 oz bottles	lb	8.00
Popodhyllin 5 lb bottles	lb	4.00 4.15
Potassium Acetate, USP, 100 lb kegs	lb	.29 .30
Bicarb, USP, crys 320 lb bbls	lb	.09½ .10
Bromide, USP, crys 100 lb cs	lb	.31 .32
Citrate, USP, 100 lb. box	lb	.42½ .43
Guaiacol Sulfonate	lb	1.95 2.25
Potassium Hypophosphite, 10 lb. cans	lb	.65 .70
Iodide, USP, 25 lb cases	lb	2.70
Lactophosphate, 4 ox bot	lb	.90
Permangan, USP, crys, 100 lb drs wks	lb	.16 .16½
Phosphate dibasic pure, kegs	lb	.49
Salicylate, 25 lb cans	lb	1.18
Sulfate, USP, VIII, 100 lb kegs	lb	.13 .15
Sulfocyanide, CP 15 lb jars	lb	.50
Tartrate, CP, tins	lb	.65
Pyrogallol, USP, see Acid Pyrogallic		
Quinidine Alk, crystals, 100 oz. tins	oz	72 .78
Sulfate, 100 oz tins	oz	.50
QUININE SULFATE, USP, 100 oz tins	oz	.43½
1 oz tins, 100 oz lots	oz	.53½
Acetate	oz	.92
Arsenate	oz	.92
Benzoate	oz	.92
Bisulfate, USP	oz	.43½
Citrate	oz	.65
Dihydrobromide	oz	.68
Dihydrochloride, USP	oz	.66
Ethyl Carbonate	oz	.52
Ferrocyanide	oz	.92
Formate	oz	.87
Glycerophosphate	oz	1.10
Hydrobromide, USP	oz	.60
Hydrochlorosulfate	oz	.66
Hypophosphite	oz	.84
Lactate	oz	.65
Phenolsulfonate	oz	.62
Phosphate	oz	.76
Salicylate, USP	oz	.66
Tannate, USP	oz	.78
Tartrate	oz	.92
Valerate	oz	.72
Urea Hydrochloride, USP	oz	.66
Rennet, N. F. 5 lb 1:25,000	lb	2.95 3.50
Resorcinol, USP, 25 lb cans	lb	1.57 1.65
Rochelle Salt, USP, 225 lb bbl	lb	.11½ .12
Rock Sugar, 5 lb boxes	lb	.15
Saccharin, USP, 10 lb cans	lb	1.70 1.80
USP, Soluble, 10 lb cans	lb	1.75 1.85
Salicin, USP	lb	12.50
SALOL, USP, 100 lb drums	lb	.90
Saltpetre, powd, bbls wks	lb	.06½ .08¼
Santonin, USP, bulk	lb	68.00 73.00
Saponin, refined	lb	1.30 1.50
Seidlitz Mixture, 250 lb bb	lb	.10 .10½
Silver Metal, American	oz	.29½
Iodide, 16 oz lots	oz	.69
Nitrate, 100 oz bottles	oz	.26½ .27½
Nucleinate, bulk	oz	.37
Proteinate	oz	.39 .41
SODIUM BENZOATE, USP, 100 lb bbls	lb	.42 .47
Bromide, USP, 100 lb kegs	lb	.31 .32
Cacodylate, USP, 25 lb bot	lb	5.00 5.25
Citrate, USP, X100 lb. box	lb	.31½
USP VIII, 100 lb. box	lb	.25
Glycerophosphate, N.F., crys 25 lb cans	lb	1.27 1.33
Powder, 25 lb tins	lb	1.32 1.38
Soln, USP, 25 lb tins	lb	1.05 1.15
Hypophosphite, USP, 25 lb cans	lb	.60 .65
Iodide, USP, 25 lb jars	lb	3.50
Phosphate (Mono-Sodium), 100 lb kegs	lb	.28 .29
Di-Sodium USP, granular, 275 lb bbls	lb	.07½ .08
Pyrophosphate, 100 lb kegs	lb	.29
Salicylate, 100 lb kegs	lb	.47
Sulfocarbolate, USP, 100 lb kegs	lb	.25
Sulfocyanate, CP crys, jars included	lb	.60
Spartein Sulfate, USP, 25 oz bulk	oz	.65 .70
Single oz vial	oz	.77 .90
STRONTIUM BROMIDE USP, 50 lb kegs	lb	.46 .47
Carb, 100 lb kegs wks	lb	.20
Iodide, USP, 25 lb jars	lb	3.00
Lactate, kegs	lb	.90 1.10
Nitrate, 600 lb bbls NY	lb	.08 .08½
Imp. bbls NY	lb	.08 .08½
Salicylate, USP, 100 lb keg	lb	1.10
Strophanthin, USP, 1 oz vial	oz	19.00 19.00
Crystals	lb	75.00 75.00
Strychnine Alk, USP crys, 100 oz tins	oz	.37
Powdered	oz	.27
Acetate	oz	.65
Arsenate, 25 oz cans	oz	.65
Glycerophosphite, USP	oz	.65
Hydrobromide	oz	.65
Hydrochloride	oz	.65
Hypophosphite	oz	.75
Nitrate, USP	oz	.60
Phosphate	oz	.65
Sulfate, USP, powd	oz	.24
Sugar, refined, 275 lb bbl 100 lb		5.80 5.90
Milk, USP, 200 lb bbls	lb	.18 .20
Sulfonethylmethane, USP, 10 lb boxes	lb	3.85 4.05
Sulonmethane, USP, 10 lb box	lb	2.65 3.85
Sulfur flwrs. washed, USP, 125 lb bbl	lb	.06
Iodide, USP, VIII, 5 lb bot lb.		3.85
TARTAR EMETIC, USP, 300 lb bbls	lb	.26 .28
Terebene, tins	lb	.85
Terpin Hydrate, USP, 100 lb kegs	lb	.33 .35
Theobromine Alk, 5 lb cans	lb	1.60 1.80
Sod. Salicylate, 1 lb bot	lb	1.85
Sod. Benzoate, 1 oz vials	oz	1.00
Thymol, USP, 25 lb tins	lb	1.45 1.60
Iodide kegs	lb	4.30
Titanium Oxide, tons, bags, lb	lb	.18
100 lb. kegs	lb	.19½
Veratrine Alkaloid	oz	2.25
Sulfate, 1 oz vials	oz	2.25
Witch Hazel Ext., 50 gal bbl	gal	.60 .80
Zinc Carb, USP, 100 lb keg	lb	.28 .31
Chloride, USP, 25 jars ex	lb	.24 .29
Iodide, 5 lb bottles	lb	4.25
Oxide, USP, 100 lb bbls	lb	.13 .14
Stearate, USP, 50 lb bbl	lb	.16 .17
Sulfate, USP, 100 lb bbl	lb	.08 .09
Sulfocarbolate, 100 lb kegs	lb	.23 .26

Miscellaneous

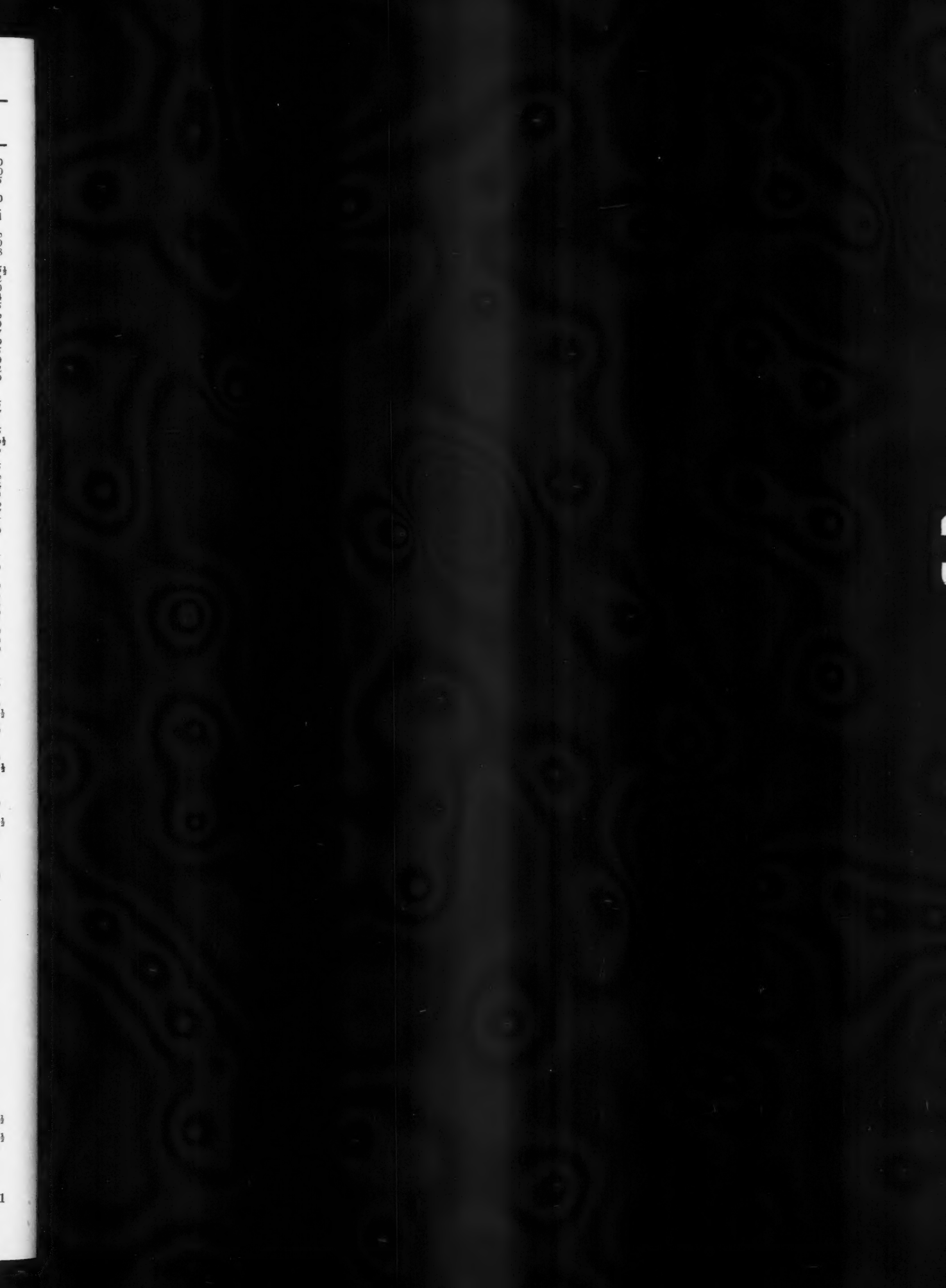
Absorption Bases	lb	.60 .75
Castor Oil, odorless, bbls	lb	.12
Chalk drop, 175 lb. bbls	lb	.03½
Precip. light, 250 lb. cask	lb	.04½
Heavy 540 lb. casks	lb	.04½
English light, bags	lb	.04½
English light, casks	lb	.05½
Cocoa Butter, fingers	lb	.24 .25
12 lb. box		
Cod Liver Oil Nor. 30 gal. bbls		28.00 30.00
Newfoundland	bbl	21.00 22.00
Collodion U. S. P. 30 lb. dr	lb	.13 .14
Colors certified; 1 lb. cans, 5 lb. cans		
Amaranth No. 107	lb	2.55 2.65
Brilliant Blue F.C.F.	lb	13.00 13.50
Erythrosine No. 517	lb	17.00 17.50
Orange Ind. 85	lb	2.55 2.65
Ponceau 3R No. 56	lb	5.25 5.50
Tartrazine No. 94	lb	2.55 2.65
Corn Syrup 42° 50 gal. bbl.	100 lb	2.28
Gelatin, USP, Silver 100 lb. cases	lb	.49 .55
Pure Food, 50 lb. bbl	lb	.47 .49
Glucose, (grape sugar) dry 70° bags c-1 NY	100 lb	3.14 3.24
Haarlem Oil, bot 6 gross cases	gross	3.25
Imported, 5 gr. cs	gross	3.35
Kaolin, Bags	lb	.05 .08
Colloidal Grade 200 lb. tin lined wooden drums	lb	.10½ .12
Mineral Oil White, 50 gal. bbls.		
80-85 vis	gal	.45 .50
85-90 vis	gal	.65 .70
125-130 vis	gal	.75 .85
290 vis	gal	.80 .90
Russian 80-85 vis	gal	.55 .60
110-115 vis	gal	.70 .75
145-155 vis	gal	.73 .78
180-185 vis	gal	.78 .83
335-345 vis	gal	.83 .88
Olive Oil, Edible bbls	gal	1.45 1.65
Paraffin Wax, fully refined, slabs		
125 @ 127 A.M.P. bags lb		.03½
130 @ 132 A.M.P. bags lb		.04
135 @ 137 A.M.P bags lb		.04½
Petrolatum, Lily White, USP, 400 lb. bbl	lb	.07 .08
Snow White USP, 400 lb. bbls	lb	.08 .09
Rice Starch, 140 lb bags	lb	.09 .10
Soap Castile, bars 40 lb. Case	Cs	12.75
Powd. USP 250 lb. bbls	lb	.21 .23
Green, USP, 450 lb. bbls	lb	.07½ .07¾
Neutral, powd. 200 lb. bbls.	lb	.18 .20
Talc, Italian, 220 lb bags	ton	55.00 75.00
French, 220 lb bags	ton	45.00 50.00
Turtle Oil, gal		3.50 5.00

Waxes, See Drugs & Spices

Acetophenene, CP, 1 lb bot	lb.	3.50	3.65
Aldehyde, C 8 (Otcyl) 1 lb bot	lb.	30.00	35.00
C 7, 1 lb bot	lb.	4.50	5.50
C 9 (Nonyl), 1 lb bot	lb.	40.00	45.00
C 10 (Decyl), 1 lb bot	lb.	30.00	35.00
C 14, 1 lb bot	lb.	8.50	14.00
C 16, 1 lb bot	lb.	9.25	18.00
AMYL ACETATE, pure, 25 lb cans	lb.	.43	.50
Butyrate, 1 lb bot	lb.	.95	1.50
Butyrate, 5 lb bot	lb.	...	1.00
Cinnamate, 5 lb bot	lb.	9.50	9.75
Formate, 1 lb bot	lb.	...	1.75
Formate, 5 lb bot	lb.	4.50	1.60
Phenyl Acetate, 1 lb bot	lb.	.65	5.00
Salicylate, 100 lb cbys	lb.	1.00	1.25
Anethol, 2 lb bot	lb.	3.10	1.10
Anisic Aldehyde, 1 lb bot	lb.	1.30	3.60
Benzaldehyde, USP, 40 lb cbys	lb.	1.35	1.40
FFC, 40 lb cbys	lb.	.60	1.45
Benzoic Ether, see Ethyl Benzoate	lb.	1.75	2.25
Benzophenone, 1 lb bot	lb.	.60	.80
Benzyl Acetate, 100 lb cbys	lb.	.85	.95
Alcohol, 5 lb bot	lb.	1.10	1.15
BENZYL BENZOATE	lb.	...	1.40
Medicinal, FFC	lb.	9.25	9.50
Butyrate, CP, 1 lb bot	lb.	7.00	7.25
Benzyl Cinnamate, 1½ bot	lb.	3.15	3.25
Formate, 1 lb bot	lb.	2.25	2.40
Propionate, 1 lb bot	lb.	5.25	5.50
Succinate, 1 lb bot	lb.	3.00	3.25
Valerate, 5 lb bot	lb.	1.35	1.85
Borneol, 1 lb bot	lb.	1.50	2.00
Bornyl Acetate, 1 lb bot	lb.	3.75	3.85
Bromstyrol, 25 lb cases	lb.	...	...
Butyl Anthranilate dom, 1 lb bot	lb.	3.10	3.50
Carvol, 5 lb bot	lb.	3.25	3.50
Cinnamic Acid, 5 lb cans	lb.	2.50	2.60
Alcohol liquid, 1 lb bot	lb.	3.50	4.00
Crystallizable	lb.	2.25	2.50
Aldehyde	lb.	7.75	9.00
Imported, 1 lb bot	lb.	1.85	3.20
Citral, 25 lb cans	lb.	2.00	2.25
Citronellol 1 lb bot	lb.	3.50	3.75
Citronelyl Acetate, 1 lb bot	lb.	3.25	3.50
Coumarin, 25 lb cans	lb.	22.00	25.00
DECYL ALCOHOL	lb.	1.05	1.20
Diphenyloxide, 25 lb tins	lb.	1.75	2.00
Diphenyl Methane	lb.	24.00	26.00
Duodecyl Alcohol	lb.	.05½	.06½
Ethyl Acetate, pure, 5 lb bot	lb.	1.25	1.50
Benzoate, 5 lb bot	lb.	1.80	2.00
Ethyl Butyrate, 5 lb bot	lb.	3.25	3.50
Caproate, 1 lb bot	lb.	4.00	4.50
Cinnamate, 1 lb bot	lb.	1.00	1.25
Formate, 5 lb bot	lb.	3.25	3.50
Methyl Paracresol, 1 lb bot	lb.	3.75	4.00
Phenyl Acetate, 5 lb bot	lb.	1.95	2.00
Salicylate, 5 lb bot	lb.	.57	.60
Eucalyptol, USP, 50 lb cans	lb.	2.00	2.50
Eugenol, USP, 25 lb cans	lb.	1.75	2.35
Geraniol, 50 lb cases	lb.	2.75	2.80
Geranyl Acetate, 1 lb bot	lb.	13.00	13.50
Butyrate, 1 lb bot	lb.	12.00	12.50
Formate, 1 lb bot	lb.	1.75	2.00
Heliotropin, 100-10 lbs	lb.	2.10	2.30
Imported	lb.	2.75	3.85
Hydroxycitronellal, 1 lb	lb.	2.90	3.00
Indol, CP, 1 oz bot	oz.	4.00	4.50
IONONE, 1 lb bot 100%	lb.	5.75	6.00
Alpha	lb.	4.50	5.00
Beta	lb.	5.00	5.25
Methyl	lb.	2.25	2.35
Iso Borneol	lb.	3.00	3.20
Iso Bornyl Acetate	lb.	2.75	3.00
Iso-Butyl Benzoate, 5 lb bot	lb.	3.00	3.05
Iso-Eugenol, 1 lb bot	lb.	1.75	1.85
Iso-Safrol, 1 lb bot imp	lb.	3.50	3.75
Domestic, 5 lb bot	lb.	1.65	3.50
Linalol from Bois de Rose, 5 lb bot	lb.	2.25	2.35
Linalyl Acetate, 1 lb bot	lb.	13.00	14.00
Benzoate, 1 lb bot	lb.	10.50	12.00
Formate, 5 lb bot	lb.	...	...
METHYL ACETOPHENONE	lb.	2.00	2.15
Anthranilate, 1 lb bot	lb.	2.10	2.20
Imported	lb.	2.70	2.75
Benzoate, 5 lb bot imp	lb.	1.25	1.35
Domestic, 5 lb bot	lb.	1.25	1.35
Cinnamate, 1 lb bot	lb.	3.35	3.85
Heptenone, 1 lb bot	lb	3.50	4.00
Paracresol, 1 lb bot	lb	4.50	8.00
Phenylacetate, 5 lb bot	lb	2.50	2.75
Salicylate, USP, 500 lb dr	lb.	...	.42
50 lb cases	lb.	...	.13
Mirbane rect. 1,000 lb drs	lb.	.12	.13
Musk Ambrette 1 lb cans	lb	6.00	6.25
Musk Ketone 1 lb cans	lb.	7.55	7.80
Xylene 5 lb cans	lb.	2.25	2.85
Nerolin 1 lb cans	lb.	1.35	1.40
Octyl Alcohol 1 lb bot	lb.	18.00	20.00
Oenanthic Ether lb bot	lb.	1.90	2.00
Oleoresin Aspidum, USP, bot and tins	lb.	...	1.25
Capsicum, USP, bot and tins	lb.	2.10	2.25
Cubeb, USP, bot and tins	lb.	2.30	2.60
Ginger bot and tins	lb.	2.25	2.80
Malefern see Aspidum			
Orris, bot & tins	lb.	12.00	15.00
Pepper, black, USP, bot & tin	lb.	...	9.50
Vanilla, bot & tins	lb.	3.80	4.00
Paracresol Methyl Ether	lb.	4.25	4.50
Paracresyl Acetate	lb.	5.50	5.75
Para Cymene Refd 110 gal dr	gal.	2.25	2.50
PHENYLACETALDEHYDE 50% 1 lb bot	lb.	4.50	4.75
Imported 50%	lb.	4.50	4.75
100%	lb.	8.00	8.25
Phenylacetic Acid 1 lb bot	lb.	2.85	2.90
Phenyl Diacetate 1 oz bot	oz.	3.00	3.25
1 lb bot	lb.	8.00	10.00
Imported	lb.	7.00	7.75
Phenylethyl Alcohol 1 lb bot	lb.	3.75	4.00
Phenyl Ethyl Acetate	lb.	8.25	8.75
Butyrate 1 lb bot	lb.	15.00	16.00
Formate, 1 lb bot	lb.	19.00	21.00
Propionate, 1 lb bot	lb.	10.00	12.00
Valerate, 1 lb bot	lb.	14.00	15.00
Phenylpropylalcohol, 1 lb bot	lb.	8.50	9.00
Rhodinol, 1 lb bot	lb.	7.00	15.00
Skatol, 1 oz bot	lb.	4.50	7.00
Terpinyl Acetate, 25 lb cans	lb.	.85	.90
Imported, 25 lb cans		.85	.90
TERPINEOL, CP, 1000 lb drs	lb.	.32	.33
50 lb cans	lb.	.35	.36
Absolute, 25 lb cans	lb.	.48	.50
TOLYL ALDEHYDE, F.F.C. 40 lb. carboys	lb	2.10	2.25
Valerianic Ether see Ethyl Valerate			
Vanillin (Clove Oil), USP	lb.	4.50	4.75
(Guaiacol) USP	lb.	4.25	4.50

Essential Oils

Almond Bitter, USP, 5 lb bot	lb.	2.00	2.10
Bitter, ffPA, 5 lb bot	lb.	2.10	2.20
Sweet, 50 lb cans	lb.	.50	.56
Almond Meal, 25 lb cans	lb.	.18	.19
Amber crude, 25 lb tins	lb.	.18	.20
Rectified, 25 lb tins	lb.	.55	.60
Amber liquid, 400 lb drs	lb.	2.20	2.30
Ambergris, Black, boxes	oz.	14.00	15.00
Gray boxes	oz.	25.00	30.00
Angelica Root, 1 lb bot	lb.	29.00	32.00
Anise Tech, 400 lb drums	lb.	.38	.41
USP, 60 lb cans	lb.	.40	.43
Apricot Kernel, 50 lb cans	lb.	.22	.23
Bay, *25 lb tins N. F. V., 50.55%* Phenol	lb.	1.50	1.65
Terpeneless	lb.	4.25	4.45
BERGAMOT, 25 lb coppers	lb.	1.20	1.75
Terpeneless	lb.	6.25	8.00
Artificial, 25 lb cans	lb.	1.00	1.40
Birch, Sweet, Northern, 25 lb tins	lb.	3.00	3.10
Southern, 25 lb tins	lb.	...	1.85
Birch Tar, rect., 5 lb bot	lb.	.50	.55
Crude, 50 lb tins	lb.	.13	.14
Bois de Rose, tins Brazilian	lb.	1.00	1.10
Cayenne, tins	lb.	2.10	2.30
Cade, 25 lb cans	lb.	.24	.30
Cajuput, native, 50 lb tins	lb.	.45	.57
Calamus, 5 lb bot	lb.	2.75	3.00
Camphor Sassa, 1000 lb drs	lb.	.12	.14
White, 400 lb drs	lb.	.16	.18
Cans, 50 lbs	lb.	.18	.20
CANANGA, Native 25 lb tins	lb.	1.80	2.00
Rectified, 25 lb tins	lb.	2.25	2.45
Caraway, USP	lb.	1.75	1.80
Cardamon, NF, 1 lb bot	lb.	14.00	15.00
Cascarilla, 1 lb bot	lb.	56.00	70.00
Cassia, Redist, USP, 50 lb cans	lb.	1.05	1.10
Cedar Leaf, 50 lb tins	lb.	.70	.75
Cedar Wood, light, 1000 lb drs	lb.	.28	.32
Celery, 1 lb bot	lb.	10.50	12.50
Chaulmoogra, USP 80 lb cases	lb.	...	1.50
Cinnamom Ceylon, 1 lb bot	lb.	8.00	10.00
Leaf, 5 lb bot	lb.	1.85	1.95
CITRONELLA Ceylon, 1000 lb drs	lb.	.37	.38
50 lb tins	lb.	.39	.40
Java, 400 lb drs	lb.	.44	.46
50 lb tins	lb.	.46	.48
Civet, Abyssin, horns	oz.	2.10	3.00
Cloves, USP, 50 lb cans	lb.	.85	.90
6 lb bot	lb.	.95	1.00
Copaiba	lb.	.55	.60
Coriander, USP, 10 lb bots	lb.	4.10	4.35
Croton USP, 25 lb tins	lb.	2.35	2.60
Cubebs, USP, 5 lb bot	lb.	2.55	2.85
Cumin, 1 lb bot	lb.	7.00	7.50
Dill, 25 lb cans	lb.	3.25	5.25
Erigeron, 20 lb tins	lb.	1.00	1.10
EUCALYPTUS Austl, USP, 56 lb cans, cases	lb.	.24	.26
500 lb drs	lb.	.22	.23
Fennel, USP, 25 lb tins	lb.	1.35	1.40
Geranium African, 25 lb tins	lb.	4.50	5.25
Bourbon, 28 lb tins	lb.	4.50	5.00
Turkish, 28 lb tins	lb.	1.95	2.15
Ginger, 1 lb bot	lb.	3.00	3.25
Gingergrass, 28 lb tins	lb.	2.50	2.70
Grape Fruit	lb.	2.75	2.85
Hemlock, 25 lb tins	lb.	.75	.90
Juniper Berries, USP, 25 lb tins	lb.	1.20	2.00
Wood, 50 lb tins	lb.	.50	.60
Labdanum, 5 lb bot	lb.	5.50	6.00
LAVENDER, USP, 28 lb tins	lb	1.40	2.10
Spike Spanish, 50 lb cans	lb.	.48	.65
Lemon Ital, 25 lb cans	lb.	1.00	1.25
California 35 lb cbys	lb.	...	.75
Lemongrass, native, 50 lb cans	lb.	.70	.73
Limes, expressed, 25 lb tins	lb.	10.00	12.50
Distilled, 25 lb tins	lb.	7.25	7.75
Linaloe Mex., 70 lb cases	lb.	...	1.40
Mace, distilled, 50 lb tins	lb	1.00	1.05
Mandarin, 25 lb cases	lb.	3.75	4.00
Musk Pods Cabardine, tins	lb.	...	...
Musk Tonquin, tins, Pods	oz.	18.00	20.00
Tonquin, tins, Grained	oz.	20.00	22.00
MUSTARD, USP, 1 lb bots	lb.	8.50	9.00
Artif, USP, 5 lb bot	lb.	1.65	1.75
Neroli Bigarade, ¼ & ½ & 1 lb bot	lb.	75.00	105.00
Petale, 1 lb bot	lb.	95.00	105.00
Artificial, 1 lb bot	lb.	5.00	15.00
Nutmeg, USP, 50 lb tins	lb	1.05	1.10
ORANGE BITTER, 25 lb tins	lb	1.10	1.50
Sweet African 25 lb. tins	lb.	1.10	1.15
Sweet W Ind, 25 lb tins	lb	1.25	1.50
Italian, 25 lb cop	lb	1.20	1.60
Orange American, Cold pressed 25 lb tins	lb.	...	.90
Distilled, 25 lb tins	lb.	...	.50
Spanish, 25 lb tins	lb.	...	1.60
Oil Orris, concrete	oz.	4.00	4.25
Origanum, 50 lb cans tech	lb.	.25	.27
Parsley, 1 lb bot	lb.	6.50	6.75
Patchouli, 5 lb bot	lb.	3.25	4.00
Pennyroyal, dom, 25 lb tins	lb.	1.65	1.75
Imported, 25 lb tins	lb.	...	1.25
Pepper Black lb.			6.00
Peppermint, nat. 60 lb cases	lb.	3.25	3.45
Redis, USP, 60 lb cs	lb.	3.65	4.00
Petit Grain S.A., 25 lb tins	lb.	1.00	1.05
French, 1 lb bot	lb.	4.50	4.75
Italian, 25 lb tins	lb.	2.20	2.30
Pimento Leaf, 25 lb tins	lb.	1.15	1.30
Berries, 25 lb tins	lb.	3.00	3.10
Pine Needle Siberian, cans	lb.	.75	.95
Pinus, Sylvestris, 25 lb tins	lb.	1.40	2.00
Pumilio, USP, 25 lb tins	lb.	1.85	1.90
Rose Fr, 8, 16, & 32 oz pkgs	lb.	14.00	17.00
Bulg, 8, 10 & 32 oz pkgs	oz.	6.00	17.00
Rosemary, USP, 27½ lb tins	lb.	.34	.40
1000 lb drums	lb.	.32	.38
Tech, 25½ lb tins	lb.	.26	.28
Rue, 1 lb bot	lb.	2.25	2.50
SANDALWOOD, E Ind, USP, 100 lb case	lb.	5.50	6.50
W Indian (Amyris), 25 lb. tins	lb.	2.85	2.95
Australian, Tins		5.25	5.65
Sassafras, USP, 50 lb cans	lb.	.68	.90
Artificial, 1000 lb drs, 60 lb cans	lb.	.20½	.23
Safrol, cans	lb.	.24	.26
Sage, Dalmatian, 25 lb. cans	lb.	2.00	2.10
Savin, 50 lb tins	lb.	1.85	2.00
Snakeroot, Canada	lb.	8.25	8.50
SPEARMINT, USP, 50 lb tins	lb	1.45	1.65
Spruce, 50 lb tins	lb	.70	.75
Tansy, American, 25 lb tins	lb.	1.75	1.95
Tar, 50 gal bbls	lb.	.25	.30
USP, 50 gal bbls	lb.	.75	1.50
Thyme, red, NF, 25 lb tins	lb.	.65	.80
White, NF, 25 lb tins	lb.	.65	.90
Tech, 110 lb drums	lb.	.50	.55
Turpentine, USP, rect cbys	lb.	.27	.30
Vetivert Bourbon, 10 bot	lb.	4.10	4.25
Indian, 1 lb bot	lb.	25.00	38.00
Java, 1 lb bot	lb.	12.00	13.00
Wine, heavy, 1 lb bot	lb.	1.50	1.60
WINTERGREEN Gaultheria, true, 25 lb tin	lb.	8.00	10.00
Southern, 25 lb tins	lb.	3.75	4.00
Synthetic see Methyl salicylate			
Wormseed, Balt, 25 lb tins	lb.	1.85	2.10
Wormwood, dom, 25 lb tins	lb.	2.70	3.20
Ylang Ylang Bourbon, 10 lb tins No. 1	lb.	4.00	5.50
10 lb tins No. 2	lb.	3.00	3.50
Manila, 1 lb bot	lb.	22.00	30.20

Drugs and Spices

Aconite Root, USP, bags....lb.	.12	.13
Agar Agar, No. 1, bales....lb.	.44	.47
Agar Agar No. 2. bales.....lb.	.39	.42
Aletris Root, bags.....lb.	.16	.18
Alkanet Root, bags.....lb	.11	.13
ALOES, Cape, 400 lb cases. lb.	.10	.11
Curacao, 140 lb cases.....lb.	.10	.11
Socotrine, Whole, 300 lb cs lb.	.30	.32
Althea Root, bags.....lb.	.14	.16
Cut cases.....lb.	.16	.18
Angelica Root, bags.....lb.	.12	.14
Angostura Bark, bags.....lb.	.19	.20
Anise seed Star, bags.....lb	.11	.11½
Spanish, bags.....lb	.09½	.10
ARABIC GUM, White, No. 1, 220 lb bags.....lb.	.16	.17
Seconds, 220 lb bags.....lb.	.14	.15
Sorts, Amber, 220 lb bags..lb.	.08	.08¼
Powd, USP, 300 lb bbls....lb.	.11	.15
Areca Nuts, 100 lb bbls.....lb.	.05	.07
Powd, 100 lb bbls.....lb.	.10	.11
Arnica Flowers, bales.....lb.	.12	.13
Root, bags.....lb.	.40	.41
Arrowroot, St. Vincent, powd bbls.....lb.	.09	.09½
Asafoetida, 250 lb cases.....lb.	.18	.20
Powd, 50 lb boxes.....lb.	.32	.35
Balm Gilead Buds, bags....lb.	.20	.21
Balmony Herbs, bales.....lb.	.10	.12
BALSAM COPAIBA Para, 80 lb cases.....lb.	.24	.25
South American, USP, 80 lb cases.....lb.	.26	.27
Peru, 120 lb cases.....lb.	.90	.95
Tolu, 90 lb cases.....lb.	.78	.88
Barberry Bark, of root, bags lb.	.15	.17
Bayberry Bark, bales.....lb.	.07	.08
Wax bbls.....lb.	.16	.18
Bees Wax, White, cases.....lb.	.30	.34
Yellow refined cases.....lb.	.22	.25
Yellow Crude Bags.....lb.	.17	.21
BELLADONNA LEAVES, bale .....lb.	.11	.14
Root, bags.....lb.	.11	.12
Benzoin Gum, Siam, boxes...lb.	1.05	1.30
Sumatra, cases.....lb.	.20	.22
Berberis Aquafolium Root, bags .....lb.	.09	.10
Beth Root, bags.....lb.	.08	.09
Black Indian Hemp Root, 100 lb bags.....lb.	.11	.12
Blood Root, bags.....lb.	.10	.11
Blueflag Root, bags.....lb.	.12	.13
Boldo Leaves, bales.....lb.	.11	.13
Boneset Herb, bales.....lb.	.08	.09
Borage Flowers, bales.....lb.	.19	.20
Broomtop Herb Cut, bales..lb.	.08	.09
Bryonia Root, bags.....lb.	.10	.11
BUCHU LEAVES Short, 250 lb. bales.....lb.	.20	.22
Long bales.....lb.	.75	.80
Buckbean Leaves, bales.....lb.	.09	.10
Buckthorn Bark, bags.....lb.	.06	.07
Berries, bags.....lb.	.29	.34
Burdock Root, bags.....lb.	.09	.10
Seed bags.....lb.	.30	...
Burgundy Pitch, 110 stand gross for net.....lb.	.08	.09
Imported.....lb.	.10	.11
Calabar Beans, bags.....lb.	.15	.16
Calamus Root, blchd cases..lb.	.23	.25
Unbleached, bags.....lb.	.07	.08
Calendula Petals, imp bales..lb.	.45	.47
Calisaya Bark, bales.....lb.	.17	.18
Powdered, bbls.....lb.	.22	.23
Canary Seed, South America, bags.....lb.	.03½	.04
Morocco.....lb.	.03½	.04
Turkish.....lb.	.03½	.04
Candelilla Wax, bags.....lb.	.09½	.11
Cannella Alba Bark, bales...lb.	.25	.26
Cannabis, U.S.P.....lb	.16	.23
Cantharides, Chinese, cases..lb.	1.00	1.05
Powdered, boxes.....lb.	1.15	1.25
Russian, cases.....lb.	1.80	2.00
Powdered, boxes.....lb.	No stocks	
Caraway Seed, Dutch, bags..lb.	.09½	.09½
Cardamon bleached, cases...lb.	.80	1.10
Decorticated, cases.....lb.	.54½	.55½
Carnauba Wax No. 1, 100 lb. bags.....lb.	.29	.30
Cascara Amarga, 150 lb bbls.lb.	1.25	1.30
So called bales.....lb.	.25	.30
CASCARA SAGRADA,		
1931 bark.....lb.	.11	.12
1932 bark.....lb.	.10	.11
New crop.....lb.	.09	.10
Cascarilla Bark, quills, bales.lb.	.70	.75
Siftings, bbls.....lb.	.50	...
Cassia Batavia No. 1 bbls....lb.	.09½	.10
Shortstick, bales.....lb.	.08½	.09
Batavia No. 3, bales.....lb.	.07	.07½
China Select Rolls, cases..lb.	.05½	.06
Broken, bales.....lb.	.04½	.05
Saigon, thin.....lb.	.18	.18½
Buds, cases.....lb.	.12	.12½
Fistula, baskets.....lb.	.07½	.09
Catnip, Herb, bales.....lb.	.14	.15
Celery Seed, bales.....lb.	.65	.68
Ceresin Wax, White, bags...lb.	.11	.15
Yellow 200 lb. bags.....lb.	.10	.12
Imp. white 100 lb. bags.lb.	.21	.38
CHAMOMILE FLOWERS		
Roman, bales.....lb.	.35	.45
Hungarian, cases.....lb.	.16	.17
Charcoal Willow, powd, bbls.lb.	06	.06½
Wood, powd, bbls.....lb.	.04	.05
Chestnut Bark.....lb.	.07	.08
Leaves bales.....lb.	.05	.06
Chicle Gum, 200 lb. bales...lb.	.27	.30
Chiretta, bales.....lb.	.13	.14
Cinnamon, Ceylon, No. 1, bales .....lb.	.12	.14
No. 2 bales.....lb.	.09	.09½
Clover Tops, Red, bags ....lb.	.14	.16
Cloves Zanzibar, bales.....lb.	.10½	.11
Cochineal, Black.....lb.	.51	...
Silver.....lb.	.45	...
Cohosh Root, Black, bags....lb.	.05	.06
Blue, bags.....lb.	.06	.07
Colchicum Root, bags.....lb.	.11	.13
Seed, bags.....lb.	.60	.65
COLOMBO ROOT, bags...lb.	.05	.07
Colocynth Pulp, bales.....lb.	.13	.14
Coltsfoot Leaves, bags.....lb.	.07	.08
Comfrey Root, bags.....lb.	.11	.12
Condurango Bark, bags.....lb.	.09	.10
Coriander Seed, Morocco, bags .....lb.	.06	.07
Bleached, bags.....lb.	.08	.09
Corn Silk, bales.....lb.	.06	.07
Cotton Root Bark, bales....lb.	.06	.07
Cowhage, 1 oz tins.....oz.	1.00	...
Cramp Bark so called bales..lb.	.06	.07
True, bags.....lb.	.25	.27
Cranesbill Root, bags.....lb.	.08	.09
CUBEB BERRIES, XX bags .....lb.	.30	.31
Powdered, boxes.....lb	.32	.33
Culvers Root, bags.....lb.	.12	.13
Cumin Seed, Morocco, bags..lb.	.09½	.10
Cuttlefish, Bone Trieste, Straps .....lb.	.19	.22
French, boxes.....lb.	.18	.21
Powdered, bbls.....lb.	.09	.10
Broken, bales.....lb.	.07	...
Damiana Leaves, bales.....lb.	.16	.17
Dandelion Root, Imp. bags..lb.	.12	.13
Deer Tongue Leaves, bales...lb.	.07	.09
Digitalis Leaves, bales.....lb.	.28	.30
Dogwood Bark, Jamaica bags .....lb.	.07	.08
American bales.....lb.	.06½	...
Doggrass Root, USP, cut bags .....lb.	.11	.12
Dragons Blood Mass, cases..lb.	.80	.85
Reeds, boxes.....lb.	.85	.90
Echinacea Root, bags.....lb.	.15	.16
Elcampane Root, bags.....lb.	.06	.07
Elder Flowers, bags.....lb.	.14	.15
Elemi Gum, 85 lb cases.....lb.	.09½	.10
Elm Bark, bundles.....lb.	.14	.17
Grinding bags.....lb.	.08	.09
Powdered, bbls.....lb.	.13	.16
Ephedra Vulgaris, bales.....lb.	.05	.06
ERGOT, 150-200 lb bags....lb.	.38	.45
Eucalyptus Leaves, bales....lb.	.06	.07
Euphorbia Pilulifera, Herb, bags.....lb	.06	.08
Euphorbium Gum, cases....lb.	.14	.20
Fennel Seed, French, bags...lb.	.07½	.08
German bags.....lb.	.09	.10
Foenugreek Seed, 200 lb bags .....lb.	.04½	.05
Fish Berries, 100-125 lb bag..lb.	.14	.15
Flax Seed, Whole 182 lb bbls.lb.	.05½	.06½
Ground, 180 lb bbls.....lb.	.06	.07½
Fringe Tree Bark or Root bags .....lb.	.10	.12
Fumigating Pastiles, boxes..lb.	.28	.30
Galangal Root, bags.....lb.	.08	.09
Galbanum Gum, cans.....lb.	.85	.90
Gamboge Gum, 100 lb cases..lb.	.50	.55
Powdered, cases.....lb.	.65	.70
Gelsemium Root. bags.....lb.	.07	.08
GENTIAN ROOT, bags....lb.	.17	.18
Ground bbls, boxes.....lb.	.19	.20
Powdered, bbls, boxes....lb.	.19	.20
Ginger, African. bags.....lb.	.05½	.06½
Jamaica Grinding bags....lb.	.10	.12
Cochin ABC & Lemon, bags .....lb.	.05½	.06
Ginseng Root, cultivated cs..lb.	8.00	10.00
Wild Southern, cases.....lb.	11.00	13.00
Golden Seal Root, bags.....lb.	.75	.80
Powdered, boxes.....lb.	.85	.95
Herb, barrels.....lb.	.35	.40
Grains of Paradise, bags....lb.	.09	.10
Grindelia Robusta, Herb, bale .....lb.	.07	.08
Guaiac Gum, 150 lb cases....lb.	.20	.22
Strained 75 lb cases...lb.	.70	.75
Guarana, tin cases.....lb.	.50	.55
Hellebore Root, Black, bbls. lb.	.05½	.06
White, 250 lb bbls.....lb.	.07	.08
Powdered.....lb.	.10	.11
Helonias Root, bags.....lb.	.25	.27
Hemp Seed, bags.....lb.	.02½	.03
Henbane Leaves, USP, bales.lb.	.10	.11
HENNA LEAVES, bales....lb.	.07	.08
Powdered.....lb.	.10	.15
Hops, bales.....lb.	.85	.90
Horehound, Herb, bales.....lb.	.06½	.07
Hydrangea Root, bales.....lb.	.06	.07
IPECAC ROOT, Cartagena, bags.....lb.	.75	.80
Powdered, 220 lb bbls...lb.	.85	.90
Nicaraugua. 125 lb. bags lb.	.60	.65
Isinglass, American, 130 lb cases .....lb.	.95	1.00
Russian (Beluga), boxes...lb.	4.50	...
Jaborandi Leaves, bales.....lb.	.10	.11
Jalap Root, Whole, 150 lb bag.....lb.	.15	.16
USP, Powd, 250 lb bbls....lb.	.19	.20
Japan Wax 224 lb. cases.....lb.	.06½	.08
JUNIPER BERRIES, 125 lb bags.....lb.	.05	.05½
Kamala, boxes.....lb.	.21	.22
Karaya Gum, Powdered, bbls.lb.	.11	.20
Kava Kava Root, bags.....lb.	.13	.14
Kino Gum, Black, cases.....lb.	.50	.55
Kola Nuts, 150 lb bags.....lb.	.05½	.06
Lady Slipper Root, bags....lb.	.28	.30
Larkspur Seed, bags.....lb.	.25	.27
Laurel Berries, bags.....lb.	.08	.09
Leaves, Greek. bales.....lb.	.04½	.05
Lavender Flowers, Ordinary.lb.	.16	.20
Selected.....lb.	.30	.32
Lemon Peel, bags.....lb.	.08½	.09
LICORICE ROOT, Whole bbls .....lb.	.12	.15
Spanish Natural bales....lb.	.05½	.07
Powdered, bbls.....lb.	.09	.11
Selected Cases.....lb.	.12	.15
Cutting, 125 lb bags....ln.	.06	.06½
Turkish, 150 lb bales.....lb.	.05	.06
Linden Flowers with leaves, bales.....lb.	.14	.15
Without leaves, bales...lb.	.15	.16
Liverwort Leaves, bales.....lb.	.13	.14
Lobelia, Herb, bales.....lb.	.18	.20
Seed, bags.....lb.	.21	.26
Lovage Root, Imp., bags....lb.	.15	.17
Lupulin N. F., tins.....lb.	1.40	1.85
Lycopodium, 88 lb. cases....lb.	.28	.30
MACE SIAUW, No. 1, cases .....lb.	.34	.35
Banda No. 1, cases.....lb.	.38	.39
Batavia No. 2, cases.....lb.	nominal	
Malva Flowers, Blue, bales..lb.	.65	.70
Black, bales.....lb.	.18	.33
Leaves, bales.....lb.	.12	.13
Manaca Root, bales.....lb.	.18	.19
Manna, Large Flake, cases...lb.	.40	.45
Small Flake, cakes.....lb.	.25	.30
Sorts, cases.....lb.	.45	.50
Mandrake Root, bags.....lb.	.08	.09
Marjoram, Herb.....		
French, No. 1 bales.....lb.	.23	.24
German, bales.....lb.	.21	.22
Mastic Gum, 120 lb. cases..lb.	.27	.29
Matico Leaves, bales.....lb.	.19	.21
Mezereon Bark, bags.....lb.	.15	.16
Millet Seed, Yellow, bags...lb.	.03	.03½
Montan Wax, Crude, bags..lb.	.07	.08
Bleached, pure. bags.....lb.	.26	.30
Moss, Iceland, bales.....lb.	.10	.11
Irish, Bleached, bales....lb.	.11	.12
Mullein Flowers, tins.....lb.	.95	1.00
Leaves, bales.....lb.	.07	.07½
Musk Root, Russian, bags...lb.	.06	.07
Myrrh Gum, 200 lb, cases...lb.	.21	.23
Nutgalls, Chinese, bags.....lb.	.22	...
Aleppy, bags.....lb.	...	.20
Powdered, bags.....lb.	.13	.15
Nutmegs, 110's cases.....lb.	.12	.12½
75's & 80's cases.....lb.	.15½	.16
Grinding, bags, W.I.....lb	.08½	.09
NUX-VOMICA Buttons, bag .....lb.	.05	.06
Powdered, 200 lb bbls..lb.	.09	.10
Oak Bark, bags.....lb.	.05½	.06
Olibanum Gum, 280 lb cases Siftings.....lb.	.06	.07
Tears, No. 1 Extra.....lb.	.19	.21
No. 2.....lb.	.14	.15
No. 3.....lb.	.09	.10
Opium Gum, USP, cases....lb.	10.00	11.00
Granular, cans.....lb.	11.00	12.00
Powdered, USP, cans....lb.	11.00	12.00
Orange Flowers, cases.....lb.	.25	.30
Peel, Bitter, bags.....lb.	.07½	.08
Sweet bags,.....lb.	.07½	.08
ORRIS ROOT, Flor. bid. bags .....lb.	.09	.10
Powdered, 200 lb bbls..lb.	.13	.14
Verona, bags.....lb.	.07	.08
Powdered, 200 lb bbls..lb.	.11	.12
Fingers, boxes.....lb.	.80	.85
Ozokerite Wax, Brown, Hard lb. Bags.....lb.	...	...
Green, Hard, bags.....lb.	.26	.28
Yellow, Refined, bags.....lb.	.26	.28
Papain, Crude, 150 lb cases..lb.	.22	.26
Pure, Powdered, 10 lb bot..lb.	1.40	1.45
Paprika, Spanish, bags.....lb.	1.50	1.80
Mild Hungarian, bags.....	.20	.24
Pareira Brava Root, bags....lb.	.19	.19½
Passion Flower, bales.....lb	.16	.18
Patchouli Leaves, bales.....lb.	.05½	.06½
Pennyroyal, Herb, 100 lb bags .....lb.	.15	.16
Leaves, 100 lb bags.....lb.	.08	.09
	.11	.12